

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:57:26 ; Search time 108.69 Seconds
(without alignments)
343.269 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LLEFVRLVSLCTPRNFSVSI.....DVALEHHECDVCVRGSGTG 106

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 3502263 seqs, 351980561 residues

Total number of hits satisfying chosen parameters: 3502263

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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| 2 | 597 | 100.0 | 132 | 22 | US-09-869-198A-29 |
| 3 | 597 | 100.0 | 318 | 1 | PCT-US99-22668-5 |
| 4 | 597 | 100.0 | 318 | 18 | US-09-410-349A-5 |
| 5 | 597 | 100.0 | 318 | 22 | US-09-852-209-5 |
| 6 | 597 | 100.0 | 318 | 22 | US-09-852-209A-5 |
| 7 | 597 | 100.0 | 323 | 1 | PCT-US99-31025-29 |

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| 8 | 597 | 100.0 | 323 | 18 | US-09-468-647-1 | Sequence 1, Appli |
| 9 | 597 | 100.0 | 323 | 18 | US-09-471-179-29 | Sequence 29, Appli |
| 10 | 597 | 100.0 | 323 | 22 | US-09-869-198A-1 | Sequence 1, Appli |
| 11 | 597 | 100.0 | 339 | 1 | PCT-US00-05918-776 | Sequence 776, App |
| 12 | 597 | 100.0 | 339 | 23 | US-09-925-302-776 | Sequence 2, Appli |
| 13 | 597 | 100.0 | 345 | 1 | PCT-US99-01574-2 | Sequence 2, Appli |
| 14 | 597 | 100.0 | 345 | 1 | PCT-US99-15783-4 | Sequence 4, Appli |
| 15 | 597 | 100.0 | 345 | 1 | PCT-US99-22668-3 | Sequence 3, Appli |
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| 19 | 597 | 100.0 | 345 | 14 | US-09-040-220-2 | Sequence 2, Appli |
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| 22 | 597 | 100.0 | 345 | 16 | US-09-223-546-2 | Sequence 2, Appli |
| 23 | 597 | 100.0 | 345 | 16 | US-09-237-705-2 | Sequence 2, Appli |
| 24 | 597 | 100.0 | 345 | 16 | US-09-265-686-2 | Sequence 2, Appli |
| 25 | 597 | 100.0 | 345 | 16 | US-09-267-213-2 | Sequence 2, Appli |
| 26 | 597 | 100.0 | 345 | 17 | US-09-304-216-33 | Sequence 33, Appli |
| 27 | 597 | 100.0 | 345 | 17 | US-09-313-457-1 | Sequence 1, Appli |
| 28 | 597 | 100.0 | 345 | 17 | US-09-380-138-488 | Sequence 488, App |
| 29 | 597 | 100.0 | 345 | 18 | US-09-410-349A-3 | Sequence 3, Appli |
| 30 | 597 | 100.0 | 345 | 18 | US-09-457-066-2 | Sequence 2, Appli |
| 31 | 597 | 100.0 | 345 | 18 | US-09-458-690A-4 | Sequence 4, Appli |
| 32 | 597 | 100.0 | 345 | 18 | US-09-468-647-2 | Sequence 2, Appli |
| 33 | 597 | 100.0 | 345 | 18 | US-09-471-179-2 | Sequence 2, Appli |
| 34 | 597 | 100.0 | 345 | 19 | US-09-540-224-5 | Sequence 5, Appli |
| 35 | 597 | 100.0 | 345 | 19 | US-09-540-703-2 | Sequence 2, Appli |
| 36 | 597 | 100.0 | 345 | 19 | US-09-541-752-2 | Sequence 2, Appli |
| 37 | 597 | 100.0 | 345 | 19 | US-09-564-595-33 | Sequence 33, Appli |
| 38 | 597 | 100.0 | 345 | 19 | US-09-564-595A-33 | Sequence 33, Appli |
| 39 | 597 | 100.0 | 345 | 19 | US-09-564-595B-33 | Sequence 2, Appli |
| 40 | 597 | 100.0 | 345 | 19 | US-09-599-596-2 | Sequence 2, Appli |
| 41 | 597 | 100.0 | 345 | 20 | US-09-662-783-24 | Sequence 24, Appli |
| 42 | 597 | 100.0 | 345 | 20 | US-09-685-330-24 | Sequence 24, Appli |
| 43 | 597 | 100.0 | 345 | 20 | US-09-688-312-51 | Sequence 51, Appli |
| 44 | 597 | 100.0 | 345 | 20 | US-09-691-200-32 | Sequence 32, Appli |
| 45 | 597 | 100.0 | 345 | 20 | US-09-695-121-2 | Sequence 2, Appli |

ALIGNMENTS

RESULT 1

US-09-468-647-29

; Sequence 29, Application US/09468647

; GENERAL INFORMATION:

; APPLICANT: Sprengel, Robert D.

; APPLICANT: Yon, Jeffrey R.

; APPLICANT: Dijkmans, Joslena J.H.

; APPLICANT: Gosiewska, Anna

; APPLICANT: Dhanaraj, Sridevi N.

; APPLICANT: Xu, Jean

; TITLE OF INVENTION: Vascular Endothelial Growth Factor-X

; FILE REFERENCE: B0192/7011

; CURRENT APPLICATION NUMBER: US/09/468,647

; CURRENT FILING DATE: 1999-12-21

; PRIOR APPLICATION NUMBER: GB 9828377.3

; PRIOR FILING DATE: 1998-12-22

; PRIOR APPLICATION NUMBER: US 60/124,967

; PRIOR FILING DATE: 1999-03-18

; PRIOR APPLICATION NUMBER: US 60/164,131

; PRIOR FILING DATE: 1999-11-08

; NUMBER OF SEQ ID NOS: 29

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 29

; LENGTH: 132

; TYPE: PRT

; ORGANISM: Homo sapiens

US-09-468-647-29

QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 273 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 318

RESULT 5

US-09-852-209-5
; Sequence 5, Application US/09852209
; GENERAL INFORMATION:
; APPLICANT: ERIKSSON, Ulf
; APPLICANT: AASE, Karin
; APPLICANT: LEE, Xuri
; APPLICANT: PONTEN, Annica
; APPLICANT: UTELA, Marko
; APPLICANT: ALITALO, Kari
; APPLICANT: OESTMAN, Arne
; APPLICANT: HELDIN, Carl-Henrik
; APPLICANT: BETSHOLTZ, Christer
; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C, DNA CODING
; TITLE OF INVENTION: THEREFOR, AND USES THEREOF
; FILE REFERENCE: 09-410349-Eriksson et al-1064-44740
; CURRENT APPLICATION NUMBER: US/09/852,209
; CURRENT FILING DATE: 2001-05-10
; PRIOR APPLICATION NUMBER: 09/410,349
; PRIOR FILING DATE: 1999-09-30
; PRIOR APPLICATION NUMBER: 60/110,749
; PRIOR FILING DATE: 1998-12-03
; PRIOR APPLICATION NUMBER: 60/113,002
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 60/135,426
; PRIOR FILING DATE: 1999-05-21
; PRIOR APPLICATION NUMBER: 60/144,022
; PRIOR FILING DATE: 1999-07-15
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-852-209-5

Query Match 100.0%; Score 597; DB 22; Length 318;
Best Local Similarity 100.0%; Pred. No. 2.4e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 273 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 318

RESULT 6

US-09-852-209A-5
; Sequence 5, Application US/09852209A
; GENERAL INFORMATION:
; APPLICANT: ERIKSSON, Ulf
; APPLICANT: AASE, Karin
; APPLICANT: LEE, Xuri
; APPLICANT: PONTEN, Annica
; APPLICANT: UTELA, Marko
; APPLICANT: ALITALO, Kari
; APPLICANT: OESTMAN, Arne
; APPLICANT: HELDIN, Carl-Henrik
; APPLICANT: BETSHOLTZ, Christer
; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C, DNA CODING
; TITLE OF INVENTION: THEREFOR, AND USES THEREOF
; FILE REFERENCE: 09-410349-Eriksson et al-1064-44740
; CURRENT APPLICATION NUMBER: US/09/852,209A
; CURRENT FILING DATE: 2001-05-10

; PRIOR APPLICATION NUMBER: 09/410,349
; PRIOR FILING DATE: 1999-09-30
; PRIOR APPLICATION NUMBER: 60/110,749
; PRIOR FILING DATE: 1998-12-03
; PRIOR APPLICATION NUMBER: 60/113,002
; PRIOR FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 60/135,426
; PRIOR FILING DATE: 1999-05-21
; PRIOR APPLICATION NUMBER: 60/144,022
; PRIOR FILING DATE: 1999-07-15
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 318
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-852-209A-5

Query Match 100.0%; Score 597; DB 22; Length 318;
Best Local Similarity 100.0%; Pred. No. 2.4e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
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QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 273 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 318

RESULT 7

PCT-US99-31025-29
; Sequence 29, Application PC/TUS9931025
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals, Inc.
; TITLE OF INVENTION: SECRETED PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE: 7853-173-228
; CURRENT APPLICATION NUMBER: PCT/US99/31025
; CURRENT FILING DATE: 1999-12-23
; EARLIER APPLICATION NUMBER: 09/223,546
; EARLIER FILING DATE: 1998-12-30
; NUMBER OF SEQ ID NOS: 135
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 29
; LENGTH: 323
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-31025-29

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Best Local Similarity 100.0%; Pred. No. 2.4e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 218 LTTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 277

QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 106
Db 278 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCVCRGSGTG 323

RESULT 8

US-09-468-647-1
; Sequence 1, Application US/09468647
; GENERAL INFORMATION:
; APPLICANT: Gordon, Robert D.
; APPLICANT: Sprengel, Jorg J.
; APPLICANT: Yon, Jeffrey R.

RESULT 12
US-09-925-302-776
; Sequence 776, Application US/09925302
; GENERAL INFORMATION:
; APPLICANT: Rosen et al.
; TITLE OF INVENTION: Nucleic Acids, Proteins and Antibodies
; FILE REFERENCE: PA104
; CURRENT APPLICATION NUMBER: US/09/925,302
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: PCT/US00/05918
; PRIOR FILING DATE: 2000-03-08
; PRIOR APPLICATION NUMBER: 60/124,270
; PRIOR FILING DATE: 1999-03-12
; NUMBER OF SEQ ID NOS: 896
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 776
; LENGTH: 339
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-925-302-776

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Best Local Similarity 100.0%; Pred. No. 2.6e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 234 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 293
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QY 61 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 106
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DB 294 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 339
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RESULT 13
PCT-US99-01574-2
; Sequence 2, Application PC/TUS9901574A
; GENERAL INFORMATION:
; APPLICANT: Song, Ho Yeong
; APPLICANT: Na, Songqing
; APPLICANT: Dou, Shenshen
; TITLE OF INVENTION: VEGF Related Gene and Protein
; FILE REFERENCE: X-11851
; CURRENT APPLICATION NUMBER: PCT/US99/01574A
; CURRENT FILING DATE: 1999-01-26
; NUMBER OF SEQ ID NOS: 2
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-01574-2

Query Match 100.0%; Score 597; DB 1; Length 345;
Best Local Similarity 100.0%; Pred. No. 2.6e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
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DB 240 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299
|||||

QY 61 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 106
|||||

DB 300 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 345
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RESULT 14
PCT-US99-15783-4
; Sequence 4, Application PC/TUS9915783
; GENERAL INFORMATION:
; APPLICANT: Human Genome Sciences, Inc.

; TITLE OF INVENTION: Bone Morphogenic Protein
; FILE REFERENCE: PTO12.PCT
; CURRENT APPLICATION NUMBER: PCT/US99/15783
; CURRENT FILING DATE: 1999-07-14
; EARLIER APPLICATION NUMBER: 60/092,922
; EARLIER FILING DATE: 1998-07-15
; NUMBER OF SEQ ID NOS: 5
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-15783-4

Query Match 100.0%; Score 597; DB 1; Length 345;
Best Local Similarity 100.0%; Pred. No. 2.6e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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|||||
DB 240 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299
|||||

QY 61 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 106
|||||

DB 300 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 345
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RESULT 15
PCT-US99-22668-3
; Sequence 3, Application PC/TUS9922668B
; GENERAL INFORMATION:
; APPLICANT: LUDWIG INSTITUTE FOR CANCER RESEARCH
; APPLICANT: HELSINKI UNIVERSITY LICENSING LTD.
; TITLE OF INVENTION: PLATELET-DERIVED GROWTH FACTOR C, DNA CODING
; TITLE OF INVENTION: THEREFOR, AND USES THEREOF
; FILE REFERENCE: PCT/US99/22669-LUDWIG INST FOR CANCER
; CURRENT APPLICATION NUMBER: PCT/US99/22668B
; CURRENT FILING DATE: 1999-09-30
; EARLIER APPLICATION NUMBER: 60/102,461
; EARLIER FILING DATE: 1998-09-30
; EARLIER APPLICATION NUMBER: 60/108,109
; EARLIER FILING DATE: 1998-11-12
; EARLIER APPLICATION NUMBER: 60/110,749
; EARLIER FILING DATE: 1998-12-03
; EARLIER APPLICATION NUMBER: 60/113,002
; EARLIER FILING DATE: 1998-12-18
; EARLIER APPLICATION NUMBER: 60/135,426
; EARLIER FILING DATE: 1999-05-21
; EARLIER APPLICATION NUMBER: 60/144,022
; EARLIER FILING DATE: 1999-07-15
; NUMBER OF SEQ ID NOS: 39
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
PCT-US99-22668-3

Query Match 100.0%; Score 597; DB 1; Length 345;
Best Local Similarity 100.0%; Pred. No. 2.6e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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|||||
DB 240 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299
|||||

QY 61 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 106
|||||

DB 300 KVTKKYHEVLQRPKTVGRGLHKSLLTDVALEHHEECDCVCRGSGTGG 345
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Search completed: May 24, 2002, 10:00:56
Job time: 210 sec

| Result No. | Score | Query Match | Length | DB | ID | Description |
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| 2 | 597 | 100.0 | 317 | 5 | US-09-564-595D-56 | Sequence 56, Appl |
| 3 | 597 | 100.0 | 345 | 5 | US-09-978-403A-488 | Sequence 488, Appl |
| 4 | 597 | 100.0 | 345 | 5 | US-09-978-544A-488 | Sequence 488, Appl |
| 5 | 597 | 100.0 | 345 | 5 | US-09-978-681A-488 | Sequence 488, Appl |
| 6 | 597 | 100.0 | 345 | 5 | US-09-978-757A-488 | Sequence 488, Appl |
| 7 | 597 | 100.0 | 345 | 5 | US-09-978-564A-488 | Sequence 488, Appl |
| 8 | 597 | 100.0 | 345 | 5 | US-09-999-831A-488 | Sequence 488, Appl |
| 9 | 597 | 100.0 | 345 | 5 | US-09-564-595D-53 | Sequence 33, Appl |
| 10 | 597 | 100.0 | 345 | 5 | US-09-999-829A-488 | Sequence 488, Appl |
| 11 | 597 | 100.0 | 345 | 5 | US-09-978-375A-488 | Sequence 488, Appl |
| 12 | 597 | 100.0 | 345 | 6 | US-10-013-921A-488 | Sequence 488, Appl |
| 13 | 597 | 100.0 | 345 | 6 | US-10-013-929A-488 | Sequence 488, Appl |
| 14 | 597 | 100.0 | 345 | 6 | US-10-013-918A-488 | Sequence 488, Appl |
| 15 | 597 | 100.0 | 345 | 6 | US-10-017-082A-488 | Sequence 488, Appl |
| 16 | 597 | 100.0 | 345 | 6 | US-10-121-049-286 | Sequence 286, Appl |
| 17 | 597 | 100.0 | 345 | 6 | US-10-121-050-286 | Sequence 286, Appl |
| 18 | 597 | 100.0 | 345 | 6 | US-10-121-053-286 | Sequence 286, Appl |
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| 22 | 597 | 100.0 | 345 | 6 | US-10-121-054-286 | Sequence 286, Appl |
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| 24 | 597 | 100.0 | 345 | 6 | US-10-121-057-286 | Sequence 286, Appl |
| 25 | 597 | 100.0 | 345 | 6 | US-10-121-058-286 | Sequence 286, Appl |
| 26 | 597 | 100.0 | 345 | 6 | US-10-121-060-286 | Sequence 286, Appl |

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; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FastSeq for Windows version 4.0
; SEQ ID NO 56
; LENGTH: 317
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: fusion polypeptide
; US-09-564-595D-56

Query Match          100.0%; Score 597; DB 5; Length 317;
Best Local Similarity 100.0%; Pred. No. 1.3e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEVRLVSCPTPNFSVSIRELKRDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 60
Db 212 LTTEVRLVSCPTPNFSVSIRELKRDTIFWPGCLLVKRCGNCACCLHNCNECQVPS 271

QY 61 KVTKKYHEVLQRPKTVGRLHKSLLTDVALEHHEEDCDVCRGSTGG 106
Db 272 KVTKKYHEVLQRPKTVGRLHKSLLTDVALEHHEEDCDVCRGSTGG 317

RESULT 3
; US-09-978-403A-488
; Sequence 488, Application US/09978403A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
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; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James;
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630P1C17
; CURRENT APPLICATION NUMBER: US/09/978,403A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
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;; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 5; Length 345;

Best Local Similarity 100.0%; Pred. No. 1.4e-53; Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 4

US-09-978-544A-488

; Sequence 488, Application US/09978544A

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; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
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; APPLICANT: Shelton, David L.
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; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC13
; CURRENT APPLICATION NUMBER: US/09/978,544A
; CURRENT FILING DATE: 2002-03-19
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Query Match      100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 5
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; Sequence 488. Application US/09978681A
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; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
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; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Acids and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC18
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;; PRIOR APPLICATION NUMBER: 60/083545
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083554
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083558
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083559
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083500
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083742
;; PRIOR FILING DATE: 1998-04-30
;; PRIOR APPLICATION NUMBER: 60/084366
;; PRIOR FILING DATE: 1998-05-05
;; PRIOR APPLICATION NUMBER: 60/084414
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084441
;; PRIOR FILING DATE: 1998-05-06
;; PRIOR APPLICATION NUMBER: 60/084637
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084639
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084640
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084598
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084600
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084627
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084643
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/085339
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085338
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085323
;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085582
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085700
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085689
;; PRIOR FILING DATE: 1998-05-15

;; PRIOR APPLICATION NUMBER: 60/085579
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085580
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085573
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15
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Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
OY 1 LITEEVRLYSCTPRNFSVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECCQVPS 60
DB 240 LITEEVRLYSCTPRNFSVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECCQVPS 299
OY 61 KVTKKYHEVLQRLPKTGVRGLHKS LTDVALEHHEEDCDVCRGSTGG 106
DB 300 KVTKKYHEVLQRLPKTGVRGLHKS LTDVALEHHEEDCDVCRGSTGG 345
RESULT 6
US-09-978-757A-488
; Sequence 488, Application US/09978757A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC26
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632

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| 1 | PRIOR APPLICATION NUMBER: 60/082566 |
| 2 | PRIOR FILING DATE: 1998-04-21 |
| 3 | PRIOR APPLICATION NUMBER: 60/082569 |
| 4 | PRIOR FILING DATE: 1998-04-21 |
| 5 | PRIOR APPLICATION NUMBER: 60/082704 |
| 6 | PRIOR FILING DATE: 1998-04-22 |
| 7 | PRIOR APPLICATION NUMBER: 60/082804 |
| 8 | PRIOR FILING DATE: 1998-04-22 |
| 9 | PRIOR APPLICATION NUMBER: 60/082700 |
| 10 | PRIOR FILING DATE: 1998-04-22 |
| 11 | PRIOR APPLICATION NUMBER: 60/082797 |
| 12 | PRIOR FILING DATE: 1998-04-22 |
| 13 | PRIOR APPLICATION NUMBER: 60/082796 |
| 14 | PRIOR FILING DATE: 1998-04-23 |
| 15 | PRIOR APPLICATION NUMBER: 60/083336 |
| 16 | PRIOR FILING DATE: 1998-04-27 |
| 17 | PRIOR APPLICATION NUMBER: 60/083322 |
| 18 | PRIOR FILING DATE: 1998-04-28 |
| 19 | PRIOR APPLICATION NUMBER: 60/083392 |
| 20 | PRIOR FILING DATE: 1998-04-29 |
| 21 | PRIOR APPLICATION NUMBER: 60/083495 |
| 22 | PRIOR FILING DATE: 1998-04-29 |
| 23 | PRIOR APPLICATION NUMBER: 60/083496 |
| 24 | PRIOR FILING DATE: 1998-04-29 |
| 25 | PRIOR APPLICATION NUMBER: 60/083499 |
| 26 | PRIOR FILING DATE: 1998-04-29 |
| 27 | PRIOR APPLICATION NUMBER: 60/083545 |
| 28 | PRIOR FILING DATE: 1998-04-29 |
| 29 | PRIOR APPLICATION NUMBER: 60/083554 |
| 30 | PRIOR FILING DATE: 1998-04-29 |
| 31 | PRIOR APPLICATION NUMBER: 60/083558 |
| 32 | PRIOR FILING DATE: 1998-04-29 |
| 33 | PRIOR APPLICATION NUMBER: 60/083559 |
| 34 | PRIOR FILING DATE: 1998-04-29 |
| 35 | PRIOR APPLICATION NUMBER: 60/083500 |
| 36 | PRIOR FILING DATE: 1998-04-29 |
| 37 | PRIOR APPLICATION NUMBER: 60/083742 |
| 38 | PRIOR FILING DATE: 1998-04-30 |
| 39 | PRIOR APPLICATION NUMBER: 60/084366 |
| 40 | PRIOR FILING DATE: 1998-05-05 |
| 41 | PRIOR APPLICATION NUMBER: 60/084414 |
| 42 | PRIOR FILING DATE: 1998-05-06 |
| 43 | PRIOR APPLICATION NUMBER: 60/084441 |
| 44 | PRIOR FILING DATE: 1998-05-06 |
| 45 | PRIOR APPLICATION NUMBER: 60/084637 |
| 46 | PRIOR FILING DATE: 1998-05-07 |
| 47 | PRIOR APPLICATION NUMBER: 60/084639 |
| 48 | PRIOR FILING DATE: 1998-05-07 |
| 49 | PRIOR APPLICATION NUMBER: 60/084640 |
| 50 | PRIOR FILING DATE: 1998-05-07 |
| 51 | PRIOR APPLICATION NUMBER: 60/084627 |
| 52 | PRIOR FILING DATE: 1998-05-07 |
| 53 | PRIOR APPLICATION NUMBER: 60/084598 |
| 54 | PRIOR FILING DATE: 1998-05-07 |
| 55 | PRIOR APPLICATION NUMBER: 60/084600 |
| 56 | PRIOR FILING DATE: 1998-05-07 |
| 57 | PRIOR APPLICATION NUMBER: 60/085338 |
| 58 | PRIOR FILING DATE: 1998-05-13 |
| 59 | PRIOR APPLICATION NUMBER: 60/085323 |
| 60 | PRIOR FILING DATE: 1998-05-13 |
| 61 | PRIOR APPLICATION NUMBER: 60/085582 |
| 62 | PRIOR FILING DATE: 1998-05-15 |
| 63 | PRIOR APPLICATION NUMBER: 60/085700 |
| 64 | PRIOR FILING DATE: 1998-05-15 |
| 65 | PRIOR APPLICATION NUMBER: 60/085689 |
| 66 | PRIOR FILING DATE: 1998-05-15 |
| 67 | PRIOR APPLICATION NUMBER: 60/085579 |
| 68 | PRIOR FILING DATE: 1998-05-15 |
| 69 | PRIOR APPLICATION NUMBER: 60/085580 |
| 70 | PRIOR FILING DATE: 1998-05-15 |

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; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15

Query Match          100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1,4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVLRYSCTRPNSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
    |||||
Db 240 LITEEVLRYSCTRPNSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
    |||||

QY 61 KVTKKYHEVLQRPKTVGRLHKLTDVALEHHEEDCVCRGSTGG 106
    |||||
Db 300 KVTKKYHEVLQRPKTVGRLHKLTDVALEHHEEDCVCRGSTGG 345

RESULT 7
US-09-978-564A-488
Sequence 488, Application US/09978564A
GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC25
; CURRENT APPLICATION NUMBER: US/09/978,564A
; CURRENT FILING DATE: 2001-10-16
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
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; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078939
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
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; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
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; PRIOR APPLICATION NUMBER: 60/079689
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; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079728
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; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079920
; PRIOR FILING DATE: 1998-03-30
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; PRIOR FILING DATE: 1998-03-30
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; PRIOR APPLICATION NUMBER: 60/080327
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; PRIOR APPLICATION NUMBER: 60/080334
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; PRIOR FILING DATE: 1998-04-09
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; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081955
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081817
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081819
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081952
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081838
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/082568
; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 60/082569
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; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 60/082704
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082804
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082700
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082797
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082796
; PRIOR FILING DATE: 1998-04-23
; PRIOR APPLICATION NUMBER: 60/083336
; PRIOR FILING DATE: 1998-04-27
; PRIOR APPLICATION NUMBER: 60/083322
; PRIOR FILING DATE: 1998-04-28
; PRIOR APPLICATION NUMBER: 60/083392
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083495
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083496
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083499
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083545
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083554
; PRIOR FILING DATE: 1998-04-29
; PRIOR APPLICATION NUMBER: 60/083558
; PRIOR FILING DATE: 1998-04-30
; PRIOR APPLICATION NUMBER: 60/084366
; PRIOR FILING DATE: 1998-05-05
; PRIOR APPLICATION NUMBER: 60/084414
; PRIOR FILING DATE: 1998-05-06
; PRIOR APPLICATION NUMBER: 60/084441
; PRIOR FILING DATE: 1998-05-06
; PRIOR APPLICATION NUMBER: 60/084637
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084639
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084640
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084598
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084600
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/084627
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; PRIOR APPLICATION NUMBER: 60/084643
; PRIOR FILING DATE: 1998-05-07
; PRIOR APPLICATION NUMBER: 60/085339
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; PRIOR APPLICATION NUMBER: 60/085338
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085323
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: 60/085582
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085700
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085689
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085579
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085580
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085573
; PRIOR FILING DATE: 1998-05-15

; PRIOR APPLICATION NUMBER: 60/085704
; PRIOR FILING DATE: 1998-05-15
; PRIOR APPLICATION NUMBER: 60/085697
; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred.No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
|||||
Db 240 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
|||||
QY 61 KVTYKYHEVLQRLPKTGVRLHKLSTDVLEHHEEDCVCRGSTGG 106
|||||
Db 300 KVTYKYHEVLQRLPKTGVRLHKLSTDVLEHHEEDCVCRGSTGG 345

RESULT 8

US-09-999-831A-488
; Sequence 488, Application US/09999831A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher *
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James;
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC68
; CURRENT APPLICATION NUMBER: US/09/999,831A
; CURRENT FILING DATE: 2002-03-25
; NUMBER OF SEQ ID NOS: 624
; Prior Application removed - See File Wrapper or Palm
; SEQ ID NO 488
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-999-831A-488

Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred.No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
|||||
Db 240 LITEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
|||||
QY 61 KVTYKYHEVLQRLPKTGVRLHKLSTDVLEHHEEDCVCRGSTGG 106
|||||

Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 345

RESULT 9

US-09-564-595D-33
; Sequence 33, Application US/09564595D
; GENERAL INFORMATION:
; APPLICANT: Gilbert, Teresa
; APPLICANT: Hart, Charles E.
; APPLICANT: Sheppard, Paul O.
; TITLE OF INVENTION: GROWTH FACTOR HOMOLOG ZVEGF4
; FILE REFERENCE: 99-19
; CURRENT APPLICATION NUMBER: US/09/564,595D
; CURRENT FILING DATE: 2000-05-03
; PRIOR APPLICATION NUMBER: US 09/304,216
; PRIOR FILING DATE: 1999-05-03
; PRIOR APPLICATION NUMBER: US 60/164,463
; PRIOR FILING DATE: 1999-11-10
; PRIOR APPLICATION NUMBER: US 60/180,169
; PRIOR FILING DATE: 2000-02-04
; NUMBER OF SEQ ID NOS: 57
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-564-595D-33

Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
|||||
Db 240 LTTEEVRVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
|||||
QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 106
|||||
Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 345

RESULT 10

US-09-998-829A-488
; Sequence 488, Application US/0999829A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.

Query Match 100.0%; Score 597; DB 5; Length 345;

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC61
; CURRENT APPLICATION NUMBER: US/09/999,829A
; CURRENT FILING DATE: 2002-03-19
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 488
; Prior Application removed - See File Wrapper or Palm
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-999-829A-488

Query Match 100.0%; Score 597; DB 5; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTTEEVRVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
|||||
Db 240 LTTEEVRVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
|||||
QY 61 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 106
|||||
Db 300 KVTKKYHEVLQRLPKTGVRLGHLKSLTDVALEHHEEDCDVCRGSTGG 345

RESULT 11

US-09-978-375A-488
; Sequence 488, Application US/09978375A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker, Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnovers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC24
; CURRENT APPLICATION NUMBER: US/09/978,375A
; CURRENT FILING DATE: 2002-04-19
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 624
; SEQ ID NO 488
; LENGTH: 345
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-978-375A-488

Query Match 100.0%; Score 597; DB 5; Length 345;

Best Local Similarity 100.08; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLSCTPRNFSVSIREELKRTDIFWPGCLLVKRCGNCACCLHNCNEQCQVPS 60
|||||
Db 240 LITEEVRLSCTPRNFSVSIREELKRTDIFWPGCLLVKRCGNCACCLHNCNEQCQVPS 299
|||||

QY 61 KVTYKHYEVLQRPKTGVRLGHLKSLTDVALEHHECDVCVRGSGTG 106
|||||
Db 300 KVTYKHYEVLQRPKTGVRLGHLKSLTDVALEHHECDVCVRGSGTG 345
|||||

RESULT 12
US-10-013-921A-488
; Sequence 488, Application US/10013921A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: P2630PIC84
; CURRENT APPLICATION NUMBER: US/10/013,921A
; PRIOR FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078004
; PRIOR FILING DATE: 1998-03-13
; PRIOR APPLICATION NUMBER: 60/078886
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078939
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/079294
; PRIOR FILING DATE: 1998-03-25
; PRIOR APPLICATION NUMBER: 60/079656
; PRIOR FILING DATE: 1998-03-26
; PRIOR APPLICATION NUMBER: 60/079664
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079689
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079663
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; PRIOR APPLICATION NUMBER: 60/079728
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079786
; PRIOR FILING DATE: 1998-03-27
; PRIOR APPLICATION NUMBER: 60/079920
; PRIOR FILING DATE: 1998-03-30
; PRIOR APPLICATION NUMBER: 60/079923
; PRIOR FILING DATE: 1998-03-30
; PRIOR APPLICATION NUMBER: 60/080105
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080107
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080165
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080194
; PRIOR FILING DATE: 1998-03-31
; PRIOR APPLICATION NUMBER: 60/080327
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/080328
; PRIOR FILING DATE: 1998-04-01
; PRIOR APPLICATION NUMBER: 60/080333
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; PRIOR APPLICATION NUMBER: 60/080334
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; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081195
; PRIOR FILING DATE: 1998-04-08
; PRIOR APPLICATION NUMBER: 60/081203
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081229
; PRIOR FILING DATE: 1998-04-09
; PRIOR APPLICATION NUMBER: 60/081955
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081817
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081819
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081952
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/081838
; PRIOR FILING DATE: 1998-04-15
; PRIOR APPLICATION NUMBER: 60/082568
; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 60/082569
; PRIOR FILING DATE: 1998-04-21
; PRIOR APPLICATION NUMBER: 60/082704
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082804
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082700
; PRIOR FILING DATE: 1998-04-22
; PRIOR APPLICATION NUMBER: 60/082797
; PRIOR FILING DATE: 1998-04-22

PRIOR APPLICATION NUMBER: 60/082796
PRIOR FILING DATE: 1998-04-23
PRIOR APPLICATION NUMBER: 60/083336
PRIOR FILING DATE: 1998-04-27
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083392
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PRIOR APPLICATION NUMBER: 60/083495
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083496
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083499
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083545
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083554
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083558
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083500
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083742
PRIOR FILING DATE: 1998-04-30
PRIOR APPLICATION NUMBER: 60/084366
PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084441
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084637
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084639
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084598
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084600
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084627
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085339
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085338
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085323
PRIOR FILING DATE: 1998-05-13
PRIOR APPLICATION NUMBER: 60/085582
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085700
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085689
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085704
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085697
PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTLEEVRLYSCTPRNESVSIREELKRTDIFWPGCLLVKRCGNCACCLHNCNCQCVPS 60
Db 240 LTLEEVRLYSCTPRNESVSIREELKRTDIFWPGCLLVKRCGNCACCLHNCNCQCVPS 299
QY 61 KVTKKYHEVLQURPKTGVRLKSLFDVALEHHEEDCVCRCSTGG 106
Db 300 KVTKKYHEVLQURPKTGVRLKSLFDVALEHHEEDCVCRCSTGG 345
RESULT 13
US-10-013-929A-488
; Sequence 488, Application US/10013929A
; GENERAL INFORMATION:
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Baker Kevin P.
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, J. Christopher
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth J.
; APPLICANT: Kljavin, Ivar J.
; APPLICANT: Kuo, Sophia S.
; APPLICANT: Napier, Mary A.
; APPLICANT: Pan, James;
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Shelton, David L.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: P2630PIC89
; CURRENT APPLICATION NUMBER: US/10/013,929A
; CURRENT FILING DATE: 2002-03-19
; PRIOR APPLICATION NUMBER: 09/918585
; PRIOR FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/062250
; PRIOR FILING DATE: 1997-10-17
; PRIOR APPLICATION NUMBER: 60/064249
; PRIOR FILING DATE: 1997-11-03
; PRIOR APPLICATION NUMBER: 60/065311
; PRIOR FILING DATE: 1997-11-13
; PRIOR APPLICATION NUMBER: 60/066364
; PRIOR FILING DATE: 1997-11-21
; PRIOR APPLICATION NUMBER: 60/077450
; PRIOR FILING DATE: 1998-03-10
; PRIOR APPLICATION NUMBER: 60/077632
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077641
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077649
; PRIOR FILING DATE: 1998-03-11
; PRIOR APPLICATION NUMBER: 60/077791
; PRIOR FILING DATE: 1998-03-12
; PRIOR APPLICATION NUMBER: 60/078004
; PRIOR FILING DATE: 1998-03-13
; PRIOR APPLICATION NUMBER: 60/078886
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; PRIOR APPLICATION NUMBER: 60/078936
; PRIOR FILING DATE: 1998-03-20
; PRIOR APPLICATION NUMBER: 60/078910
; PRIOR FILING DATE: 1998-03-20

;; PRIOR APPLICATION NUMBER: 60/078939
;; PRIOR FILING DATE: 1998-03-20
;; PRIOR APPLICATION NUMBER: 60/079294
;; PRIOR FILING DATE: 1998-03-25
;; PRIOR APPLICATION NUMBER: 60/079656
;; PRIOR FILING DATE: 1998-03-26
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;; PRIOR FILING DATE: 1998-03-27
;; PRIOR APPLICATION NUMBER: 60/079689
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;; PRIOR APPLICATION NUMBER: 60/079786
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;; PRIOR FILING DATE: 1998-03-30
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;; PRIOR APPLICATION NUMBER: 60/080105
;; PRIOR FILING DATE: 1998-03-31
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;; PRIOR APPLICATION NUMBER: 60/080165
;; PRIOR FILING DATE: 1998-03-31
;; PRIOR APPLICATION NUMBER: 60/080194
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;; PRIOR APPLICATION NUMBER: 60/080327
;; PRIOR FILING DATE: 1998-04-01
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;; PRIOR FILING DATE: 1998-04-08
;; PRIOR APPLICATION NUMBER: 60/081049
;; PRIOR FILING DATE: 1998-04-08
;; PRIOR APPLICATION NUMBER: 60/081071
;; PRIOR FILING DATE: 1998-04-08
;; PRIOR APPLICATION NUMBER: 60/081195
;; PRIOR FILING DATE: 1998-04-08
;; PRIOR APPLICATION NUMBER: 60/081203
;; PRIOR FILING DATE: 1998-04-09
;; PRIOR APPLICATION NUMBER: 60/081229
;; PRIOR FILING DATE: 1998-04-09
;; PRIOR APPLICATION NUMBER: 60/081955
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081817
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;; PRIOR APPLICATION NUMBER: 60/081952
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/081838
;; PRIOR FILING DATE: 1998-04-15
;; PRIOR APPLICATION NUMBER: 60/082568
;; PRIOR FILING DATE: 1998-04-21
;; PRIOR APPLICATION NUMBER: 60/082569
;; PRIOR FILING DATE: 1998-04-21
;; PRIOR APPLICATION NUMBER: 60/082704
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;; PRIOR APPLICATION NUMBER: 60/082700
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;; PRIOR APPLICATION NUMBER: 60/082797
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;; PRIOR APPLICATION NUMBER: 60/083336

;; PRIOR FILING DATE: 1998-04-27
;; PRIOR APPLICATION NUMBER: 60/083322
;; PRIOR FILING DATE: 1998-04-28
;; PRIOR APPLICATION NUMBER: 60/083392
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;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083496
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083499
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083545
;; PRIOR FILING DATE: 1998-04-29
;; PRIOR APPLICATION NUMBER: 60/083554
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;; PRIOR FILING DATE: 1998-04-29
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;; PRIOR FILING DATE: 1998-04-29
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;; PRIOR FILING DATE: 1998-04-30
;; PRIOR APPLICATION NUMBER: 60/084366
;; PRIOR FILING DATE: 1998-05-05
;; PRIOR APPLICATION NUMBER: 60/084414
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;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084639
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084640
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084598
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084600
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/084627
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;; PRIOR APPLICATION NUMBER: 60/084643
;; PRIOR FILING DATE: 1998-05-07
;; PRIOR APPLICATION NUMBER: 60/085339
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;; PRIOR FILING DATE: 1998-05-13
;; PRIOR APPLICATION NUMBER: 60/085323
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;; PRIOR APPLICATION NUMBER: 60/085689
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;; PRIOR APPLICATION NUMBER: 60/085580
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085573
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085704
;; PRIOR FILING DATE: 1998-05-15
;; PRIOR APPLICATION NUMBER: 60/085697
;; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;

Best Local Similarity 100.0%; Pred. No. 1.4e-53;

Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LTFEEVRLYSCTPRNFSVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECCVPS 60

DB 240 LTFEEVRLYSCTPRNFSVSIREELKRTDTTFWPGCLLVKRCGGNCACCLHNCNECCVPS 299

1 PRIOR APPLICATION NUMBER: 60/083392
2 PRIOR FILING DATE: 1998-04-29
3 PRIOR APPLICATION NUMBER: 60/083495
4 PRIOR FILING DATE: 1998-04-29
5 PRIOR APPLICATION NUMBER: 60/083496
6 PRIOR FILING DATE: 1998-04-29
7 PRIOR APPLICATION NUMBER: 60/083499
8 PRIOR FILING DATE: 1998-04-29
9 PRIOR APPLICATION NUMBER: 60/083545
10 PRIOR FILING DATE: 1998-04-29
11 PRIOR APPLICATION NUMBER: 60/083554
12 PRIOR FILING DATE: 1998-04-29
13 PRIOR APPLICATION NUMBER: 60/083558
14 PRIOR FILING DATE: 1998-04-29
15 PRIOR APPLICATION NUMBER: 60/083559
16 PRIOR FILING DATE: 1998-04-29
17 PRIOR APPLICATION NUMBER: 60/083500
18 PRIOR FILING DATE: 1998-04-29
19 PRIOR APPLICATION NUMBER: 60/083742
20 PRIOR FILING DATE: 1998-04-30
21 PRIOR APPLICATION NUMBER: 60/084366
22 PRIOR FILING DATE: 1998-05-05
23 PRIOR APPLICATION NUMBER: 60/084414
24 PRIOR FILING DATE: 1998-05-06
25 PRIOR APPLICATION NUMBER: 60/084441
26 PRIOR FILING DATE: 1998-05-06
27 PRIOR APPLICATION NUMBER: 60/084637
28 PRIOR FILING DATE: 1998-05-07
29 PRIOR APPLICATION NUMBER: 60/084639
30 PRIOR FILING DATE: 1998-05-07
31 PRIOR APPLICATION NUMBER: 60/084640
32 PRIOR FILING DATE: 1998-05-07
33 PRIOR APPLICATION NUMBER: 60/084598
34 PRIOR FILING DATE: 1998-05-07
35 PRIOR APPLICATION NUMBER: 60/084600
36 PRIOR FILING DATE: 1998-05-07
37 PRIOR APPLICATION NUMBER: 60/084627
38 PRIOR FILING DATE: 1998-05-07
39 PRIOR APPLICATION NUMBER: 60/084643
40 PRIOR FILING DATE: 1998-05-07
41 PRIOR APPLICATION NUMBER: 60/085339
42 PRIOR FILING DATE: 1998-05-13
43 PRIOR APPLICATION NUMBER: 60/085338
44 PRIOR FILING DATE: 1998-05-13
45 PRIOR APPLICATION NUMBER: 60/085323
46 PRIOR FILING DATE: 1998-05-13
47 PRIOR APPLICATION NUMBER: 60/085582
48 PRIOR FILING DATE: 1998-05-15
49 PRIOR APPLICATION NUMBER: 60/085700
50 PRIOR FILING DATE: 1998-05-15
51 PRIOR APPLICATION NUMBER: 60/085689
52 PRIOR FILING DATE: 1998-05-15
53 PRIOR APPLICATION NUMBER: 60/085579
54 PRIOR FILING DATE: 1998-05-15
55 PRIOR APPLICATION NUMBER: 60/085580
56 PRIOR FILING DATE: 1998-05-15
57 PRIOR APPLICATION NUMBER: 60/085573
58 PRIOR FILING DATE: 1998-05-15
59 PRIOR APPLICATION NUMBER: 60/085704
60 PRIOR FILING DATE: 1998-05-15
61 PRIOR APPLICATION NUMBER: 60/085697
62 PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LITEEVRVLSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 60
DB 240 LITEEVRVLSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVPS 299
QY 61 KVTKKYHEVLQRPKTGYRGLHLSLTDVALEHHEECDCVCRGSTGG 106

Db 300 KVTKKYHEVLQRPKTGYRGLHLSLTDVALEHHEECDCVCRGSTGG 345
RESULT 15
US-10-017-082A-488
Sequence 488, Application US/10017082A
GENERAL INFORMATION:
APPLICANT: Ashkenazi, Avi
APPLICANT: Baker Kevin P.
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan
APPLICANT: Ferrara, Napoleon
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, J. Christopher
APPLICANT: Gurney, Austin L.
APPLICANT: Hillan, Kenneth J.
APPLICANT: Kljavin, Ivar J.
APPLICANT: Kuo, Sophia S.
APPLICANT: Napier, Mary A.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
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APPLICANT: Shelton, David L.
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: P2630P1C71
CURRENT APPLICATION NUMBER: US/10/017.082A
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER: 09/918585
PRIOR FILING DATE: 2001-07-30
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/064249
PRIOR FILING DATE: 1997-11-03
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/066364
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
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PRIOR APPLICATION NUMBER: 60/077791
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PRIOR APPLICATION NUMBER: 60/078939
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;; PRIOR FILING DATE: 1998-05-15
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;; PRIOR FILING DATE: 1998-05-15

Query Match 100.0%; Score 597; DB 6; Length 345;
Best Local Similarity 100.0%; Pred. No. 1.4e-53;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 240 LTTEVRLYSCTPRNFVSIREELKRTDTIFWPGCLLYKRCGNCACCLHNCNECQCVPs 299
Qy 61 KVTKKYHEVLQRPKTGVRLHKSITDVALEHHEBCDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRPKTGVRLHKSITDVALEHHEBCDCVCRGSTGG 345

Search completed: May 24, 2002, 10:01:13
Job time: 207 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:52:46 ; Search time 31.01 Seconds
(without alignments)
379.678 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LITEVRLVSLTPNFVSI.....DVALEHHECDVCVCGSTGG 106

Scoring table:

BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 747574 seqs, 111073796 residues

Total number of hits satisfying chosen parameters: 747574

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : A_Geneseq_032802.*

- 1: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA1980.DAT.*
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- 21: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2000.DAT.*
- 22: /SIDSL/gcgdata/hold-geneseq/geneseq-emb1/AA2001.DAT.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|--------------------|
| 1 | 597 | 100.0 | 113 | 21 | Human VEGF-X prote |
| 2 | 597 | 100.0 | 113 | 21 | Human VEGF-X prote |
| 3 | 597 | 100.0 | 121 | 22 | Synthetic protein |
| 4 | 597 | 100.0 | 123 | 22 | Synthetic protein |
| 5 | 597 | 100.0 | 149 | 21 | Human VEGF-X PDGF |
| 6 | 597 | 100.0 | 318 | 21 | A fragment of plat |
| 7 | 597 | 100.0 | 339 | 21 | Lung cancer associ |
| 8 | 597 | 100.0 | 345 | 20 | Human VEGF-E prote |
| 9 | 597 | 100.0 | 345 | 20 | Human PRO200 prote |
| 10 | 597 | 100.0 | 345 | 20 | Human vascular end |
| 11 | 597 | 100.0 | 345 | 21 | Human zvegf3, SEQ |

| | | | | | | |
|----|-------|-------|-----|----|----------|--------------------|
| 12 | 597 | 100.0 | 345 | 21 | AAB24250 | Human platelet-der |
| 13 | 597 | 100.0 | 345 | 21 | AAB44322 | Human PRO200 (UNQ1 |
| 14 | 597 | 100.0 | 345 | 21 | AAB10631 | Human RACE generat |
| 15 | 597 | 100.0 | 345 | 21 | AAB10634 | Human VEGF-X homol |
| 16 | 597 | 100.0 | 345 | 21 | AAB10635 | Human VEGF-X prote |
| 17 | 597 | 100.0 | 345 | 21 | AAB10636 | Human VEGF-X prote |
| 18 | 597 | 100.0 | 345 | 21 | AAB10644 | Human VEGF-X prote |
| 19 | 597 | 100.0 | 345 | 21 | AAB10650 | Human 990126veg p |
| 20 | 597 | 100.0 | 345 | 21 | AAB10651 | Human VEGF-X prote |
| 21 | 597 | 100.0 | 345 | 21 | AAB19578 | Human PRO200 (vasc |
| 22 | 597 | 100.0 | 345 | 21 | AAB33414 | Human PRO200 prote |
| 23 | 597 | 100.0 | 345 | 21 | AAB24412 | Human PRO713 prote |
| 24 | 597 | 100.0 | 345 | 21 | AAB01419 | Human TANGO 128. |
| 25 | 597 | 100.0 | 345 | 21 | AAB03003 | Human growth facto |
| 26 | 597 | 100.0 | 345 | 21 | AAV96858 | Human growth facto |
| 27 | 597 | 100.0 | 345 | 21 | AAV84557 | Amino acid sequenc |
| 28 | 597 | 100.0 | 345 | 21 | AAV59285 | Bone morphogenic p |
| 29 | 597 | 100.0 | 345 | 22 | AAV65603 | Human zvegf3 polyp |
| 30 | 597 | 100.0 | 345 | 22 | AAU08465 | Polypeptide for hu |
| 31 | 597 | 100.0 | 345 | 22 | AAU12314 | Human PRO200 polyp |
| 32 | 597 | 100.0 | 345 | 22 | AAE74028 | Human VEGF/PDGF-11 |
| 33 | 597 | 100.0 | 345 | 22 | AAE02649 | Human LP8, a PDGF- |
| 34 | 597 | 100.0 | 345 | 22 | AAE00997 | Human zvegf3 prote |
| 35 | 597 | 100.0 | 345 | 22 | AAE50980 | Human PRO200 prote |
| 36 | 597 | 100.0 | 345 | 22 | AAE49895 | Human PRO200 prote |
| 37 | 597 | 100.0 | 345 | 22 | AAE53074 | Human angiogenesis |
| 38 | 597 | 100.0 | 374 | 21 | AAB10639 | Human VEGF-X prote |
| 39 | 587 | 98.3 | 354 | 21 | AAB10640 | Human VEGF-X prote |
| 40 | 587 | 98.3 | 354 | 21 | AAB10641 | Human VEGF-X prote |
| 41 | 580.5 | 97.2 | 227 | 21 | AAB10637 | Human VEGF-X prote |
| 42 | 580.5 | 97.2 | 227 | 21 | AAB10638 | Human VEGF-X prote |
| 43 | 572 | 95.8 | 345 | 21 | AAB48658 | Mouse zvegf3, SEQ |
| 44 | 572 | 95.8 | 345 | 21 | AAV96861 | Murine vascular en |
| 45 | 572 | 95.8 | 345 | 21 | AAV84559 | A murine platelet- |

ALIGNMENTS

RESULT 1

AAB10631
ID AAB10631 standard; Protein; 113 AA.

XX AC AAB10631;

XX DT 19-JAN-2001 (first entry)

XX DE Human VEGF-X protein fragment #1.

XX KW VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
XX KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
XX KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
XX KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
XX KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
XX KW venous sore; diabetic ulcer; burns; skin graft growth.

XX OS Homo sapiens.

XX PN WO200037641-A2.

XX PD 29-JUN-2000.

XX PF 21-DEC-1999; 99WO-US30503.

XX PR 22-DEC-1998; 98GB-0028377.

XX PR 18-MAR-1999; 99US-0124967.

XX PR 08-NOV-1999; 99US-0164131.

XX (JANC) JANSSEN PHARM NV.

XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JTH, Gosiewska A;

XX PI Dhanaraj SN, Xu J;

DR WPI; 2000-442669/38.
XX N-PSDB; AAA71936.
PT New vascular endothelial growth factor protein, useful for treating or
PT preventing diseases associated with inappropriate angiogenesis activity
PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS Disclosure; Fig 1; 127pp; English.
XX
CC This invention describes a novel vascular endothelial growth factor-X
CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC vulnary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC antidiabetic activity and acts as an angiogenesis and vascularization
CC regulator. An antisense molecule of the invention is useful for treating
CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC retinopathy by inhibiting angiogenic activity or inappropriate
CC vascularization including formation and proliferation of new blood
CC vessels, growth and development of tissues, tissue regeneration and organ
CC and tissue repair in a subject. The products of the invention are useful
CC for preparing medicaments for treating wounds such as dermal ulcers,
CC pressure sores, venous sores, diabetic ulcers and burns and to promote
CC skin graft growth, tissue repair, proliferation of new blood vessels,
CC tissue regeneration and organ repair by promoting angiogenic activity or
CC vascularization. This sequence represents the human VEGF-X protein
CC described in the method of the invention.
XX
SQ Sequence 113 AA;

Query Match 100.0%; Score 597; DB 21; Length 113;
Best Local Similarity 100.0%; Pred. No. 9.6e-55;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 8 llteevrlyscprnfsvsireelkrttdtlfwpgcllvkrcgncacclhncnecqcvps 67
QY 61 KVTYKHYEVQLRPKTVGRGLHSLTDVALEHHEECDCVCRGSGTG 106
Db 68 kvtkkyheviqlrpktgvrghlsldvalehheecdcvcrsgtgg 113

RESULT 2
AAB10632
ID AAB10632 standard; Protein; 113 AA.

XX AAB10632;

XX 19-JAN-2001 (first entry)

XX Human VEGF-X protein fragment #2.

XX VEGF-X; vascular endothelial growth factor; human; vulnary; cytostatic;
KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
KW venous sore; diabetic ulcer; burns; skin graft growth.

XX Homo sapiens.

XX WO200037641-A2.

XX 29-JUN-2000.

XX 21-DEC-1999; 99WO-US30503.

XX 22-DEC-1998; 98GB-0028377.

XX 18-MAR-1999; 99US-0124967.

XX 08-NOV-1999; 99US-0164131.

XX (JANC) JANSSEN PHARM NV.

PI Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
PI Dhanaraj SN, Xu J;
XX
DR WPI; 2000-442669/38.
XX
PT New vascular endothelial growth factor protein, useful for treating or
PT preventing diseases associated with inappropriate angiogenesis activity
PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
XX
PS Disclosure; Fig 2; 127pp; English.
XX
CC This invention describes a novel vascular endothelial growth factor-X
CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
CC vulnary, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
CC antidiabetic activity and acts as an angiogenesis and vascularization
CC regulator. An antisense molecule of the invention is useful for treating
CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
CC retinopathy by inhibiting angiogenic activity or inappropriate
CC vascularization including formation and proliferation of new blood
CC vessels, growth and development of tissues, tissue regeneration and organ
CC and tissue repair in a subject. The products of the invention are useful
CC for preparing medicaments for treating wounds such as dermal ulcers,
CC pressure sores, venous sores, diabetic ulcers and burns and to promote
CC skin graft growth, tissue repair, proliferation of new blood vessels,
CC tissue regeneration and organ repair by promoting angiogenic activity or
CC vascularization. This sequence represents the human VEGF-X protein
CC described in the method of the invention.
XX
SQ Sequence 113 AA;

Query Match 100.0%; Score 597; DB 21; Length 113;
Best Local Similarity 100.0%; Pred. No. 9.6e-55;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNECQCVP 60
Db 8 llteevrlyscprnfsvsireelkrttdtlfwpgcllvkrcgncacclhncnecqcvps 67
QY 61 KVTYKHYEVQLRPKTVGRGLHSLTDVALEHHEECDCVCRGSGTG 106
Db 68 kvtkkyheviqlrpktgvrghlsldvalehheecdcvcrsgtgg 113

RESULT 3

AAB74034

ID AAB74034 standard; Protein; 121 AA.

XX AAB74034;

XX 09-AUG-2001 (first entry)

XX Synthetic protein #2.

XX VEGF/PDGF-like factor; vascular endothelial growth factor; VEGF;
KW platelet derived growth factor; PDGF; neovascularisation; disease.

XX Synthetic.

XX JP2001017188-A.

XX 23-JAN-2001.

XX 24-APR-2000; 2000JP-0122994.

XX 22-APR-1999; 99JP-0115516.

XX (KYOW) KYOWA HAKKO KOGYO KK.

XX (HERI-) HERIKKUSU KENKYUSHO KK.

XX WPI; 2001-285410/30.

XX New VEGF/PDGF-like factor useful for the development of treating agents

CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents a human VEGF-X protein
 CC PDGF-like domain which can be expressed in E. coli systems and which is
 CC described in the method of the invention.
 XX
 SQ Sequence 149 AA;

Query Match 100.0%; Score 597; DB 21; Length 149;
 Best Local Similarity 100.0%; Pred. No. 1.3e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 Db 44 llteevrlyscptnfsvsireelkrtdtifwpgcllvkrcgncacclhncnecqcvps 103
 |||||
 QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLTDVALEHHEECDCVCRGSGTG 106
 |||||
 Db 104 kvtkkyhevlqlrpkgtgvrghlksltvdalehheecdvcvrgstgg 149

RESULT 6
 AAY84558
 ID AAY84558 standard; Protein; 318 AA.
 XX
 AC AAY84558;
 XX
 DT 25-JUL-2000 (first entry)
 XX
 DE A fragment of platelet-derived growth factor C (PDGF-C).
 XX
 KW Platelet-derived growth factor C; PDGF-C; cell proliferation;
 KW growth factor; heparin; connective tissue; wound healing; VEGF-F;
 KW fibroblast mitogenesis; PDGF alpha receptor activation; tumour growth;
 KW choriocarcinoma; Wilms tumour; megakaryoblastic leukaemia;
 KW lung carcinoma; erythroleukemia; tissue remodelling.
 XX
 OS Homo sapiens.
 XX

Key Location/Qualifiers
 FT Misc-difference 287
 FT /note= "encoded by AAS"
 XX
 PN WO200018212-A2.
 XX
 PD 06-APR-2000.
 XX
 PD 30-SEP-1999; 99WO-0522668.
 XX
 PR 30-SEP-1998; 98US-0102461.
 PR 12-NOV-1998; 98US-0108109.
 PR 03-DEC-1998; 98US-0110749.
 PR 18-DEC-1998; 98US-0113002.
 PR 21-MAY-1999; 99US-0135426.
 PR 15-JUL-1999; 99US-0144022.
 XX
 PA (LUDW-) LUDWIG INST CANCER RES.
 PA (UYHE-) UNIV HELSINKI LICENSING LTD.
 XX
 PI Eriksson U, Aase K, Lee X, Ponten A, Uutela M, Alitalo K;
 PI Oestman A, Heldin C, Betsholz C;
 XX
 DR WPI; 2000-292954/25.
 DR N-PSDB; AAA12524.
 XX
 XX Novel DNA encoding PDGF-C useful to stimulate or enhance proliferation,
 PT differentiation, growth and motility of cells expressing the PDGF-C
 PT receptor
 XX
 XX Disclosure; Fig 4; 135pp; English.
 PS
 XX The present sequence represents a human platelet-derived growth factor C
 CC

CC (PDGF-C) (formally designated VEGF-F) fragment. PDGF-C polypeptides have
 CC the ability to stimulate and enhance proliferation or differentiation,
 CC and/or growth or motility of cells expressing a PDGF-C receptor.
 CC PDGF-C polypeptides can be used in pharmaceuticals for promoting cell
 CC proliferation, preferably in combination with one other growth factor
 CC and heparin. Pharmaceuticals comprising PDGF-C polypeptides can also
 CC be used for stimulating connective tissue or wound healing. The
 CC PDGF-C polypeptide can be enzymatically processed to generate the active
 CC truncated form of PDGF-C and used to regulate the receptor-binding
 CC specificity of PDGF-C. PDGF-C can also be used to promote fibroblast
 CC mitogenesis in a mammal and to induce PDGF alpha receptor activation.
 CC PDGF-C antagonists can be used to inhibit tumour growth of a tumour
 CC expressing PDGF-C in a mammal. Specific types of human tumours, e.g.
 CC choriocarcinoma, Wilms tumour, megakaryoblastic leukaemia, lung carcinoma
 CC and erythroleukemia, can be identified by testing for expression of
 CC PDGF-C. PDGF-C antagonists can also be used to inhibit tissue
 CC remodelling during invasion of tumour cells into a normal population of
 CC cells. Antagonists can also be used to treat fibrotic conditions,
 CC especially found in the lung, kidney or liver.
 XX
 SQ Sequence 318 AA;

Query Match 100.0%; Score 597; DB 21; Length 318;
 Best Local Similarity 100.0%; Pred. No. 2.9e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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 Db 213 llteevrlyscptnfsvsireelkrtdtifwpgcllvkrcgncacclhncnecqcvps 272
 |||||
 QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLTDVALEHHEECDCVCRGSGTG 106
 |||||
 Db 273 kvtkkyhevlqlrpkgtgvrghlksltvdalehheecdvcvrgstgg 318

RESULT 7
 AAB58438
 ID AAB58438 standard; Protein; 339 AA.
 XX
 AC AAB58438;
 XX
 DT 14-MAR-2001 (first entry)
 XX
 DE Lung cancer associated polypeptide sequence SEQ ID 776.
 XX
 KW Human; lung cancer associated protein; neuroprotective; cytostatic;
 KW cardioactive; immunomodulatory; muscular active; vulnerary;
 KW gastrointestinal; nephrotropic; antineoplastic; gynecological;
 KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;
 KW proliferative disorder; wound healing; infectious disease.
 XX
 OS Homo sapiens.
 XX
 PN WO2000055180-A2.
 XX
 PD 21-SEP-2000.
 XX
 PF 08-MAR-2000; 2000WO-US05918.
 XX
 PR 12-MAR-1999; 99US-0124270.
 XX
 XX (HUMA-) HUMAN GENOME SCI INC.
 PA (ROSE/) ROSEN C A.
 XX
 XX Ruben SM;
 PI
 DR WPI; 2000-587514/55.
 DR N-PSDB; AAF18314.
 XX
 PT Lung cancer associated gene sequences, referred to as lung cancer
 PT antigens, useful for treatment, prevention, and diagnosis of disorders
 PT such as lung cancer -

Claim 11; Page 1305-1306; 1425pp; English.

Polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer associated proteins represented in AAB58106 - AAB58548. Lung cancer associated proteins and polynucleotide sequences, their agonists, and antagonists may have neuroprotective; cytostatic; cardioactive; immunomodulatory; muscular active general; vulnerable; gastrointestinal general; nephrotropic; anti-infective; gynecological; or antibacterial activity. The invention also includes antibodies specific for the protein or polynucleotide sequences. The lung cancer associated polynucleotide sequences may be used for detection of lung cancer, chromosome identification, as chromosome markers, and for numerous other diagnostic or research purposes. The proteins may be used to treat disorders such as neural, immune, muscular, reproductive, gastrointestinal, pulmonary, cardiovascular, renal, and proliferative disorders. The proteins may also be used in the treatment of wounds and infectious diseases. Polynucleotide sequences AAF18425 - AAF18433 and peptide AAB58549 are used in the course of the invention for the identification and characterisation of the polynucleotide and protein sequences.

Sequence 339 AA;

Query Match 100.0%; Score 597; DB 21; Length 339;
Best Local Similarity 100.0%; Pred. No. 3.1e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLEEVLVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNCCQVPS 60
Db 234 LLEEVLVLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNCCQVPS 293
QY 61 KVTKKYHEVLQRPKTVGRGLHKSITDVALEHHHEECDCVCRGSTGG 106
Db 294 kvtkkyhevlqrpktvgrglhksltvalebheecdcvcrgstgg 339

RESULT 8
ID AAY33679
AA AAY33679 standard; Protein; 345 AA.
AC AAY33679;
XX
XX 11-JAN-2000 (first entry)
XX Human VEGF-E protein.
XX
XX VEGF-E; human; vascular endothelial cell growth factor; wound repair;
XX treatment; cardiovascular disorder; endothelial disorder; therapy;
XX tissue generation; regeneration; cardiac hypertrophy; cancer; detection;
XX angiogenic disorder; age-related macular degeneration; vascular disease;
XX neovascularization; tumor; gene mapping.
XX
OS Homo sapiens.
XX
XX WO9947677-A2.
XX
XX 23-SEP-1999.
XX
XX 10-MAR-1999; 99WO-US05190.
XX
XX 17-MAR-1998; 98US-0040220.
XX
XX 02-NOV-1998; 98US-0184216.
XX
XX (GETH) GENENTECH INC.
XX
XX Ferrara N, Kuo SS;
XX
XX WPI; 1999-580306/49.
XX
XX N-PSDB; AAZ23691.
XX
XX New growth factor polypeptide useful for treating cardiovascular or

PR 11-MAR-1998; 98US-0077649.
PR 12-MAR-1998; 98US-0077791.
PR 13-MAR-1998; 98US-0078004.
PR 17-MAR-1998; 98US-0040220.
PR 20-MAR-1998; 98US-0078886.
PR 20-MAR-1998; 98US-0078910.
PR 20-MAR-1998; 98US-0078936.
PR 20-MAR-1998; 98US-0078939.
PR 25-MAR-1998; 98US-0079294.
PR 26-MAR-1998; 98US-0079656.
PR 27-MAR-1998; 98US-0079663.
PR 27-MAR-1998; 98US-0079664.
PR 27-MAR-1998; 98US-0079669.
PR 27-MAR-1998; 98US-0079728.
PR 27-MAR-1998; 98US-0079786.
PR 30-MAR-1998; 98US-0079920.
PR 30-MAR-1998; 98US-0079923.
PR 31-MAR-1998; 98US-0080105.
PR 31-MAR-1998; 98US-0080107.
PR 31-MAR-1998; 98US-0080165.
PR 31-MAR-1998; 98US-0080194.
PR 01-APR-1998; 98US-0080327.
PR 01-APR-1998; 98US-0080328.
PR 01-APR-1998; 98US-0080338.
PR 01-APR-1998; 98US-0080334.
PR 08-APR-1998; 98US-0081049.
PR 08-APR-1998; 98US-0081070.
PR 08-APR-1998; 98US-0081071.
PR 09-APR-1998; 98US-0081195.
PR 09-APR-1998; 98US-0081203.
PR 09-APR-1998; 98US-0081229.
PR 15-APR-1998; 98US-0081817.
PR 15-APR-1998; 98US-0081838.
PR 15-APR-1998; 98US-0081952.
PR 15-APR-1998; 98US-0081955.
PR 21-APR-1998; 98US-0082568.
PR 21-APR-1998; 98US-0082569.
PR 22-APR-1998; 98US-0082700.
PR 22-APR-1998; 98US-0082704.
PR 22-APR-1998; 98US-0082804.
PR 23-APR-1998; 98US-0082767.
PR 23-APR-1998; 98US-0082796.
PR 27-APR-1998; 98US-0083336.
PR 28-APR-1998; 98US-0083322.
PR 29-APR-1998; 98US-0083392.
PR 29-APR-1998; 98US-0083495.
PR 29-APR-1998; 98US-0083496.
PR 29-APR-1998; 98US-0083499.
PR 29-APR-1998; 98US-0083500.
PR 29-APR-1998; 98US-0083545.
PR 29-APR-1998; 98US-0083554.
PR 29-APR-1998; 98US-0083558.
PR 29-APR-1998; 98US-0083559.
PR 30-APR-1998; 98US-0083742.
PR 05-MAY-1998; 98US-0084366.
PR 06-MAY-1998; 98US-0084414.
PR 06-MAY-1998; 98US-0084441.
PR 07-MAY-1998; 98US-0084598.
PR 07-MAY-1998; 98US-0084600.
PR 07-MAY-1998; 98US-0084627.
PR 07-MAY-1998; 98US-0084637.
PR 07-MAY-1998; 98US-0084639.
PR 07-MAY-1998; 98US-0084640.
PR 07-MAY-1998; 98US-0084643.
PR 13-MAY-1998; 98US-0085323.
PR 13-MAY-1998; 98US-0085338.
PR 13-MAY-1998; 98US-0085339.
PR 15-MAY-1998; 98US-0085573.
PR 15-MAY-1998; 98US-0085579.
PR 15-MAY-1998; 98US-0085580.
PR 15-MAY-1998; 98US-0085582.
PR 15-MAY-1998; 98US-0085689.
PR 15-MAY-1998; 98US-0085697.

PR 15-MAY-1998; 98US-0085700.
PR 15-MAY-1998; 98US-0085704.
PR 18-MAY-1998; 98US-0086023.
PR 22-MAY-1998; 98US-0086392.
PR 22-MAY-1998; 98US-0086414.
PR 22-MAY-1998; 98US-0086430.
PR 22-MAY-1998; 98US-0086486.
PR 28-MAY-1998; 98US-0087098.
PR 28-MAY-1998; 98US-0087106.
PR 28-MAY-1998; 98US-0087208.
PR 30-JUL-1998; 98US-0094651.
PR 11-SEP-1998; 98US-0100038.
XX
XX (GETH) GENENTECH INC.
XX
XX Wood WI, Goddard A, Gurney A, Yuan J, Baker KP, Chen J;
PI
XX
XX WPI; 1999-551358/46.
DR N-PSDB; AA234296.
XX
PT New secreted and transmembrane polypeptides and their polynucleotides,
PT useful for treating blood coagulation disorders, cancers and cellular
PT adhesion disorders -
XX
PS Claim 12; Fig 207; 530pp; English.
XX
XX The present invention describes secreted and transmembrane polypeptides
CC and their polynucleotides. The nucleotide sequences are useful as
CC sources of probes, primers, for chromosome mapping, and for generation
CC of antisense sequences. They can also be used to create transgenic
CC animals. The proteins can be used to treat a variety of diseases and
CC disorders, depending on their function. Diseases that may be treated
CC include blood coagulation disorders, cancers and cellular adhesion
CC disorders. They may also be used to raise antibodies. AA233891 to
CC AA234338, and AA41685 to AA41774 represent polynucleotide and
CC polypeptide sequence given in the exemplification of the present
CC invention.
XX
XX Sequence 345 AA;
SQ

Query Match 100.0%; Score 597; DB 20; Length 345;
Best Local Similarity 100.0%; Pred. No. 3.2e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLEEVRLXSCPTNFVSISREELKRTDTIFWPGCLLVKRCGNCACLLHNCNCCQVPS 60
|||||
Db 240 llteevrlyscptnfsvsireelkrttdtlfwpgcllvkrcgncacclhncnccqcvps 299
|||||
QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLTDVALEHHECDVCVCRGSGTG 106
|||||
Db 300 kvtkkyhevlqlrpkgtvgvrglhksltdvalehhecdvcvrgstgg 345
|||||

RESULT 10
AA30023
ID AAY30023 standard; Protein; 345 AA.
XX
AC AAY30023;
XX
DT 11-OCT-1999 (first entry)
XX
DE Human vascular endothelial growth factor related protein.
XX
KW Vascular endothelial growth factor related protein; VEGF-R protein;
KW tissue growth inhibition; tumour growth; cancer; tissue growth;
KW angiogenesis; coronary artery blockage.
XX
OS Homo sapiens.
XX
PN WO937671-A1.
XX
PD 29-JUL-1999.

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XX PF 26-JAN-1999; 99WO-US01574.
XX
XX 31-AUG-1998; 98US-0098548.
XX
XX 27-JAN-1998; 98US-0072635.
XX
XX 05-JUN-1998; 98US-0088089.
XX
XX 24-JUN-1998; 98US-0090544.
XX
XX (ELIL ) LILLY & CO ELI.
XX
XX Dou S, Na S, Song HY;
XX
XX WPI; 1999-458680/38.
XX
XX N-PSDB; AAX86352.
XX
XX A vascular endothelial growth factor related protein and related
XX polynucleotide, useful for identifying antagonists and binding
XX compounds
XX
XX Claim 1; Page 56-58; 62pp; English.
XX
XX The present sequence represents a vascular endothelial growth factor
XX related (VEGF-R) protein. VEGF-R can be used in assays to identify
XX compounds that bind to it or that antagonize its activity. VEGF-R
XX antagonists (e.g. anti-VEGF-R antibodies) are useful for inhibiting
XX tissue growth. This is useful for inhibiting tumour growth and for
XX treating cancer. VEGF-R itself can be used to stimulate tissue
XX growth, angiogenesis and to treat coronary artery blockage. The
XX VEGF-R coding sequence can be used for the recombinant production of
XX the VEGF-R protein.
XX
XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 20; Length 345;
Best Local Similarity 100.0%; Pred. No. 3.2e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCQCVPVS 60
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||
240 llteevrlyscprnfsvsireelkrttdtfwpgcllvkrccgncacclhncqcvs 299

QY 61 KVTKYKHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||
300 kvtkkyhevlqlrpkgtgvrghlsldvalehheecdvcrgstgg 345

RESULT 11
AAB48657
ID AAB48657 standard; Protein; 345 AA.
XX
XX AAB48657;
XX
XX 09-MAR-2001 (first entry)
XX
XX Human zvegf3, SEQ ID NO:33.
XX
XX Human; zvegf3; zvegf4 fusion; growth factor homologue; VEGF/PDGF family;
XX CUB domain; PDGF-like activity; mitogenic; osteogenic;
XX neovascularisation; tissue repair; proliferation; differentiation;
XX liver damage; neurodegenerative; Alzheimer's disease; multiple sclerosis;
XX periodontal disease; bone fracture; wound healing; vulnery; ischaemia;
XX immunomodulation; hepatic.
XX
XX Homo sapiens.
XX
XX WO200066736-A1.
XX
XX 09-NOV-2000.
XX
XX 03-MAY-2000; 2000WO-US40047.
XX
XX 03-MAY-1999; 99US-0304216.

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PR 10-NOV-1999; 99US-0164463.
PR
XX 04-FEB-2000; 2000US-0180169.
XX
XX (ZYMO ) ZYMOGENETICS INC.
XX
XX Gilbert T, Hart CE, Sheppard PO, Gilbertson DG;
XX
XX WPI; 2000-687541/67.
XX
XX N-PSDB; AAC81582.
XX
XX Growth factor homologs and the nucleic acids that encode them, useful
XX e.g. for treating liver damage, ischemia, multiple sclerosis and
XX Alzheimer's disease
XX
XX Claim 48; Page 125-126; 143pp; English.
XX
XX The invention relates to the human growth factor homologue zvegf4
XX (AAB48653), and nucleic acids encoding it (AAC81555). zvegf4 is a member
XX of the PDGF (platelet-derived growth factor)/VEGF (vascular endothelial
XX growth factor) family. zvegf4 has a growth factor domain (AAB48634)
XX characterised by a PDGF cysteine knot structure, and a CUB domain
XX (AAB48655) which has a beta barrel structure. zvegf4 has PDGF-like
XX activity, having mitogenic activity on fibroblasts, vascular smooth
XX muscle cells and pericytes, and has also been shown to stimulate bone
XX growth. The invention also relates to fusion proteins comprising human
XX zvegf4 or fragments thereof, particularly human zvegf4/human zvegf3
XX fusions; expression constructs and host cells comprising human zvegf4
XX nucleic acids; the recombinant expression of human zvegf4; an antibody
XX which binds to human zvegf4 or a fragment thereof; a method of activating
XX a cell-surface PDGF receptor using a zvegf4-derived polypeptide; a
XX method of modulating the proliferation, differentiation, migration or
XX metabolism of bone cells, comprising exposing bone cells to
XX zvegf4-derived polypeptides; and a method of detecting a genetic
XX abnormality in the zvegf4 gene of a patient. zvegf4 proteins and derived
XX fragments may be used to stimulate tissue development or repair, or
XX cellular differentiation or proliferation. They are particularly used for
XX the treatment or repair of liver damage, and may also be used to
XX modulate neurite growth (e.g., in the treatment of Alzheimer's disease or
XX multiple sclerosis). Due to their osteogenic activity, they may be used
XX in the treatment of periodontal disease and fractures. They may also be
XX used to enhance expansion and mobilisation of haematopoietic stem cells
XX and endothelial precursor stem cells, which may be useful in the
XX treatment of ischaemia, in wound healing, and in the modulation of the
XX immune system. The present sequence represents human zvegf3.
XX
XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
Best Local Similarity 100.0%; Pred. No. 3.2e-54;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LLTEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACCLHNCQCVPVS 60
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||
240 llteevrlyscprnfsvsireelkrttdtfwpgcllvkrccgncacclhncqcvs 299

QY 61 KVTKYKHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db |||||||||||||||||||||||||||||||||||||||||||||||||||||||
300 kvtkkyhevlqlrpkgtgvrghlsldvalehheecdvcrgstgg 345

RESULT 12
AAB24250
ID AAB24250 standard; Protein; 345 AA.
XX
XX AAB24250;
XX
XX 08-FEB-2001 (first entry)
XX
XX Human platelet-derived growth factor related protein LP8.
XX
XX Human; platelet derived growth factor related protein; LP8; VEGFh;
XX vascular endothelial growth factor h; tissue regeneration; vulnery;

```

KW atherosclerosis; PDGF-related protein; antiarteriosclerotic.

XX Homo sapiens.

XX WO200059940-A2.

XX 12-OCT-2000.

XX 24-MAR-2000; 2000WO-US06427.

XX 06-APR-1999; 99US-0127913.

XX (ELIL) LILLY & CO ELI.

XX Hammond LJ, Na S;

XX WPI: 2000-664991/64.

XX N-PSDB; AAC64426.

XX Enhancing tissue growth and promoting wound healing by administering platelet-derived growth factor related protein, LP8 or its analog and treating atherosclerosis by administering LP8 antagonist

XX Claim 4; Page 63-64; 64pp; English.

XX The present invention describes a method for enhancing tissue growth, CC promoting wound healing or stimulating smooth muscle growth by CC administering a platelet-derived growth factor (PDGF) related protein, CC designated LP8 or its analogue. Also described is a method of slowing CC the progress of atherosclerosis or treating atherosclerosis comprising CC the administration of an LP8 antagonist. The method is useful for CC enhancing tissue growth, promoting wound healing and stimulating smooth CC muscle growth. Antagonists of LP8 are useful for treating CC atherosclerosis. The present sequence represents human LP8, which is CC also called VEGFh.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;

Best Local Similarity 100.0%; Pred. No. 3.2e-54;

Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTRPNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 60

Db 240 LITEEVRLYSCTRPNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCRGSTGG 106

Db 300 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCRGSTGG 345

RESULT 13

AAB44322

ID AAB44322 standard; Protein; 345 AA.

XX AAB44322;

XX 08-FEB-2001 (first entry)

XX Human PRO200 (UNQ174) protein sequence SEQ ID NO:488.

XX Human; secreted protein; transmembrane protein; PRO; EST; cytotstatic; expressed sequence tag; detection; cancer.

XX Homo sapiens.

XX WO200053756-A2.

XX 14-SEP-2000.

XX 18-FEB-2000; 2000WO-US04341.

PR 08-MAR-1999; 99WO-US05028.

PR 12-MAR-1999; 99US-0123957.

PR 29-MAR-1999; 99US-0126773.

PR 21-APR-1999; 99US-0130232.

PR 28-APR-1999; 99US-0131445.

PR 14-MAY-1999; 99US-0134287.

PR 23-JUN-1999; 99US-0141037.

PR 26-JUL-1999; 99US-0145698.

PR 29-OCT-1999; 99US-0162506.

PR 30-NOV-1999; 99WO-US28313.

PR 02-DEC-1999; 99WO-US28551.

PR 02-DEC-1999; 99WO-US28565.

PR 16-DEC-1999; 99WO-US30095.

PR 30-DEC-1999; 99WO-US31243.

PR 30-DEC-1999; 99WO-US31274.

PR 05-JAN-2000; 2000WO-US00219.

PR 06-JAN-2000; 2000WO-US00277.

PR 06-JAN-2000; 2000WO-US00376.

XX (GETH) GENENTECH INC.

XX Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;

XX Ferrara N, Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME;

XX Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ;

XX Kijavir IJ, Kuo SS, Napier MA, Pan J, Paoni NF, Roy MA;

XX Shelton DL, Stewart TA, Tumas D, Williams PM, Wood WI;

XX WPI: 2000-611443/58.

XX N-PSDB; AAC78582.

XX Novel PRO polypeptides and polynucleotides used in detection methods,

XX to target bioactive molecules to specific cells, and to modulate

XX cellular activities

XX Claim 12; Fig 207; 636pp; English.

XX AAC78458 to AAC78599 represent polynucleotide and EST (expressed

XX sequence tag) sequences which encode secreted or transmembrane PRO

XX polypeptides. The PRO polynucleotides and polypeptides have cytostatic

XX activity. The polynucleotides and polypeptides can be used for detecting

XX the presence of PRO polypeptides in samples, for linking bioactive

XX molecules to cells and for modulating biological activities of cells,

XX using the polypeptides for specific targeting. The polypeptide targeting

XX can be used to kill the target cells, e.g. for the treatment of cancers.

XX The polypeptide pairs provide specific targeting of bioactive molecules

XX to cells. AAC78600 to AAC78987 represent PCR primers and probes used in

XX the isolation of the PRO polynucleotide sequences.

XX Sequence 345 AA;

XX Query Match 100.0%; Score 597; DB 21; Length 345;

XX Best Local Similarity 100.0%; Pred. No. 3.2e-54;

XX Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTRPNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 60

Db 240 LITEEVRLYSCTRPNFSVSIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQVPS 299

QY 61 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCRGSTGG 106

Db 300 KVTKKYHEVLQRLPKTGVRGLKSLTDVALEHHEEDCVCRGSTGG 345

RESULT 14

AAB10633

ID AAB10633 standard; Protein; 345 AA.

XX AAB10633;

XX 19-JAN-2001 (first entry)

XX Human RACE generated VEGF-X protein.

XX VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.
 XX Homo sapiens.
 OS
 PN WO200037641-A2.
 XX
 PD 29-JUN-2000.
 XX
 PF 21-DEC-1999; 99WO-US30503.
 XX
 PR 22-DEC-1998; 98GB-0028377.
 PR 18-MAR-1999; 99US-0124967.
 PR 08-NOV-1999; 99US-0164131.
 XX
 XX (JANC) JANSSEN PHARM NV.
 PA
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX
 XX WPI; 2000-442669/38.
 DR N-PSDB; AAA71951.
 XX

XX New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX
 PS Disclosure; Fig 6; 127pp; English.

XX This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC vulnery, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
 CC antidiabetic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the RACE generated human VEGF-X
 CC protein described in the method of the invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNEQCQVPS 60
 Db 240 llteevrlyscprnfsvireelkrttdtlfwpgcllvkrcgncacclhncncqcqps 299

QY 61 KVTKKYHEVLQRPKTGVRGLHKSITDVALEHHECDVCVRGSGTG 106
 Db 300 kvtkkyhevlqrpkgtvrglhlksitdvalehhecdvcvrgstgg 345

RESULT 15
 AAB10634
 ID AAB10634 standard; Protein; 345 AA.
 XX
 AC AAB10634;
 XX

DT 19-JAN-2001 (first entry)
 XX Human VEGF-X homologue protein.
 DE
 XX VEGF-X; vascular endothelial growth factor; human; vulnery; cytostatic;
 KW antirheumatic; antiarthritic; antipsoriatic; antidiabetic; treatment;
 KW angiogenesis regulator; vascularization regulator; cancer; psoriasis;
 KW rheumatoid arthritis; diabetic retinopathy; blood vessel; organ repair;
 KW tissue regeneration; tissue repair; wound; dermal ulcer; pressure sore;
 KW venous sore; diabetic ulcer; burns; skin graft growth.
 XX Homo sapiens.
 OS
 PN WO200037641-A2.
 XX
 PD 29-JUN-2000.
 XX
 PF 21-DEC-1999; 99WO-US30503.
 XX
 PR 22-DEC-1998; 98GB-0028377.
 PR 18-MAR-1999; 99US-0124967.
 PR 08-NOV-1999; 99US-0164131.
 XX
 XX (JANC) JANSSEN PHARM NV.
 PA
 XX Gordon RD, Sprengel JJ, Yon JR, Dijkmans JJH, Gosiewska A;
 PI Dhanaraj SN, Xu J;
 XX
 XX WPI; 2000-442669/38.
 DR N-PSDB; AAA71952.

XX New vascular endothelial growth factor protein, useful for treating or
 PT preventing diseases associated with inappropriate angiogenesis activity
 PT such as cancer, rheumatoid arthritis, psoriasis and wounds -
 XX
 PS Disclosure; Fig 7; 127pp; English.

XX This invention describes a novel vascular endothelial growth factor-X
 CC (VEGF-X) protein (Ia) and its encoding polynucleotide (IIa) which has
 CC vulnery, cytostatic, antirheumatic, antiarthritic, antipsoriatic and
 CC antidiabetic activity and acts as an angiogenesis and vascularization
 CC regulator. An antisense molecule of the invention is useful for treating
 CC or preventing cancer, rheumatoid arthritis, psoriasis and diabetic
 CC retinopathy by inhibiting angiogenic activity or inappropriate
 CC vascularization including formation and proliferation of new blood
 CC vessels, growth and development of tissues, tissue regeneration and organ
 CC and tissue repair in a subject. The products of the invention are useful
 CC for preparing medicaments for treating wounds such as dermal ulcers,
 CC pressure sores, venous sores, diabetic ulcers and burns and to promote
 CC skin graft growth, tissue repair, proliferation of new blood vessels,
 CC tissue regeneration and organ repair by promoting angiogenic activity or
 CC vascularization. This sequence represents the human VEGF-X protein
 CC homologue described in the method of the invention.

XX Sequence 345 AA;

Query Match 100.0%; Score 597; DB 21; Length 345;
 Best Local Similarity 100.0%; Pred. No. 3.2e-54;
 Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCTPRNFSVIREELKRTDTIFWPGCLLVKRCGNCACCLHNCNEQCQVPS 60
 Db 240 llteevrlyscprnfsvireelkrttdtlfwpgcllvkrcgncacclhncncqcqps 299

QY 61 KVTKKYHEVLQRPKTGVRGLHKSITDVALEHHECDVCVRGSGTG 106
 Db 300 kvtkkyhevlqrpkgtvrglhlksitdvalehhecdvcvrgstgg 345

Search completed: May 24, 2002, 09:58:18
 Job time: 332 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:56:16 ; Search time 13.01 Seconds
(without alignments)
199,009 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
Perfect score: 597
Sequence: 1 LLTEVRLYSLPTNFVSIV.....DVALEHHEEDCVCRGSGTG 106

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 231628 seqs, 24425594 residues

Total number of hits satisfying chosen parameters: 231628

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents AA: *
1: /cgn2.6/ptodata/2/iaa/5A.COMB.pep:*
2: /cgn2.6/ptodata/2/iaa/5B.COMB.pep:*
3: /cgn2.6/ptodata/2/iaa/6A.COMB.pep:*
4: /cgn2.6/ptodata/2/iaa/6B.COMB.pep:*
5: /cgn2.6/ptodata/2/iaa/PCTUS.COMB.pep:*
6: /cgn2.6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------------|
| 1 | 115.5 | 19.3 | 321 | 4 | US-08-915-795-9 |
| 2 | 115.5 | 19.3 | 358 | 4 | US-08-915-795-8 |
| 3 | 111.5 | 18.7 | 325 | 4 | US-08-915-795-3 |
| 4 | 111.5 | 18.7 | 354 | 4 | US-08-915-795-5 |
| 5 | 105 | 17.6 | 109 | 1 | US-08-094-079-2 |
| 6 | 105 | 17.6 | 109 | 1 | US-08-094-079-3 |
| 7 | 105 | 17.6 | 109 | 2 | US-08-804-953-3 |
| 8 | 105 | 17.6 | 109 | 3 | US-08-691-794-4 |
| 9 | 105 | 17.6 | 109 | 5 | PCT-US91-02766-18 |
| 10 | 105 | 17.6 | 109 | 5 | PCT-US93-02612-1 |
| 11 | 105 | 17.6 | 109 | 6 | 5498600-3 |
| 12 | 105 | 17.6 | 119 | 2 | US-08-257-494D-1 |
| 13 | 105 | 17.6 | 120 | 6 | 5428135-2 |
| 14 | 105 | 17.6 | 146 | 3 | US-08-989-251-2 |
| 15 | 105 | 17.6 | 146 | 3 | US-08-989-251-25 |
| 16 | 105 | 17.6 | 146 | 3 | US-09-340-250-2 |
| 17 | 105 | 17.6 | 146 | 3 | US-09-340-250-25 |
| 18 | 105 | 17.6 | 146 | 4 | US-09-528-108-2 |
| 19 | 105 | 17.6 | 146 | 4 | US-09-528-108-25 |
| 20 | 105 | 17.6 | 160 | 1 | US-08-094-079-1 |
| 21 | 105 | 17.6 | 188 | 1 | US-08-469-427A-11 |
| 22 | 105 | 17.6 | 188 | 2 | US-08-609-443B-11 |
| 23 | 105 | 17.6 | 188 | 2 | US-08-569-063C-11 |
| 24 | 105 | 17.6 | 188 | 4 | US-08-795-430-57 |
| 25 | 105 | 17.6 | 190 | 3 | US-08-867-352-25 |
| 26 | 105 | 17.6 | 205 | 3 | US-08-989-251-27 |
| 27 | 105 | 17.6 | 205 | 3 | US-08-989-251-37 |

| | | | | | | |
|----|-----|------|-----|---|-------------------|--------------------|
| 28 | 105 | 17.6 | 205 | 3 | US-09-340-250-27 | Sequence 27, Appl |
| 29 | 105 | 17.6 | 205 | 3 | US-09-340-250-37 | Sequence 37, Appl |
| 30 | 105 | 17.6 | 205 | 4 | US-09-528-108-27 | Sequence 27, Appl |
| 31 | 105 | 17.6 | 205 | 4 | US-09-528-108-37 | Sequence 37, Appl |
| 32 | 105 | 17.6 | 207 | 2 | US-08-609-443B-15 | Sequence 15, Appl |
| 33 | 105 | 17.6 | 207 | 2 | US-08-569-063C-15 | Sequence 15, Appl |
| 34 | 105 | 17.6 | 220 | 6 | 5175255-4 | Patent No. 5175255 |
| 35 | 105 | 17.6 | 241 | 1 | US-08-387-845-4 | Sequence 4, Appl |
| 36 | 105 | 17.6 | 241 | 2 | US-08-999-811-6 | Sequence 6, Appl |
| 37 | 105 | 17.6 | 241 | 2 | US-08-778-275-4 | Sequence 4, Appl |
| 38 | 105 | 17.6 | 241 | 2 | US-08-824-996-8 | Sequence 8, Appl |
| 39 | 105 | 17.6 | 241 | 3 | US-08-989-251-29 | Sequence 29, Appl |
| 40 | 105 | 17.6 | 241 | 3 | US-09-042-105-6 | Sequence 6, Appl |
| 41 | 105 | 17.6 | 241 | 3 | US-08-867-352-4 | Sequence 4, Appl |
| 42 | 105 | 17.6 | 241 | 3 | US-09-340-250-29 | Sequence 29, Appl |
| 43 | 105 | 17.6 | 241 | 4 | US-08-795-430-54 | Sequence 54, Appl |
| 44 | 105 | 17.6 | 241 | 4 | US-09-528-108-29 | Sequence 29, Appl |
| 45 | 105 | 17.6 | 241 | 5 | PCT-US96-09001-9 | Sequence 9, Appl |

ALIGNMENTS

RESULT 1
US-08-915-795-9
; Sequence 9, Application US/08915795
; Patent No. 6235713
; GENERAL INFORMATION:
; APPLICANT: Marc G. ACHEN
; APPLICANT: Andrew F. WILKS
; APPLICANT: Steven A. STACKER
; APPLICANT: Kari ALITALO
; TITLE OF INVENTION: GROWTH FACTOR
; NUMBER OF SEQUENCES: 11
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Evenson, McKeown, Edwards & Lenahan P.L.L.C.
; STREET: 1200 G Street, NW, Suite 700
; CITY: Washington
; STATE: DC
; COUNTRY: United States of America
; ZIP: 20005
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/915,795
; FILING DATE:
; CLASSIFICATION: 536
; ATTORNEY/AGENT INFORMATION:
; NAME: EVANS, Joseph D.
; REGISTRATION NUMBER: 26,269
; REFERENCE/DOCKET NUMBER: 1064/42983
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 628-8800
; TELEFAX: (202) 628-8844
; TELEX: N/A
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 321 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; ORIGINAL SOURCE:
; TISSUE TYPE: Mouse Lung
; US-08-915-795-9

Query Match 19.3%; Score 115.5; DB 4; Length 321;
Best Local Similarity 33.0%; Pred. No. 4.8e-05;
Matches 35; Conservative 15; Mismatches 41; Indels 15; Gaps 6;

RESULT 3
US-08-915-795-3
: Sequence 3, Application US/08915795

STREET: 1200 G Street, NW, suite 700
CITY: Washington

STREET: 1200 G Street, NW, Suite 700
CITY: Washington

STATE: DC
COUNTRY: United States of America
ZIP: 20005
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/915.795
FILING DATE:
CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: EVANS, Joseph D.
REGISTRATION NUMBER: 26,269
REFERENCE/DOCKET NUMBER: 1064/42983
TELEPHONE: (202) 628-8800
TELEFAX: (202) 628-8844
TELEX: N/A
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 354 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: NO
ORIGINAL SOURCE:
TISSUE TYPE: Human Lung
US-08-915-795-5

Query Match 18.7%; Score 111.5; DB 4; Length 354;
Best Local Similarity 32.7%; Pred. No. 0.00014;
Matches 33; Conservative 14; Mismatches 43; Indels 11; Gaps 5;

QY 1 LITEVRLVSCPTNPFVSIRBEL-KRTDTIWPGLLVKRCGNCACCLHNCNEC-QCV 58
DB 101 VIDEWQRTQCSPRETCVASELGLKSTNFTFKPPCVNFCRG---CCNESLIMNTS 157

QY 59 PSKVTKKYHEVLQRLPKTGVRGLHKS LTDVALEHHEECDCV 99
DB 158 TSIVSKQLFEISV--PLTSV----PELVVPKVNHTGCKL 192

RESULT 5
US-08-094-079-2
Sequence 2, Application US/08094079
Patent No. 5512545
GENERAL INFORMATION:
APPLICANT: COOK, Anne L
APPLICANT: CRAIG, Stewart
APPLICANT: CLEMENTS, John M
APPLICANT: EDWARDS, Richard M
APPLICANT: BROWN, David
TITLE OF INVENTION: PDGF-B ANALOGUES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Allegretti & Witcoff, Ltd.
STREET: 10 S. Wacker Dr.
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/094,079
FILING DATE: 24-JAN-1992

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB92/00141
FILING DATE: 24-JAN-1992
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9101645.1
FILING DATE: 24-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,640
TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: protein
LOCATION: 1..109
OTHER INFORMATION: /note= "Truncated PDGF-B (PDGF-Bt)"
US-08-094-079-2

Query Match 17.6%; Score 105; DB 1; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LFEVRLVSCPTNPFVSIRBELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECQC 57
DB 7 IAEPAIAIECKTRTEVEFIS--RRLIDRTNANELVWPVPCVEVQRCSG---CC--NNRNVC 60

QY 58 VPSKVTKKYHEVLQRLP-----KTGV---RGLHKS LTDVALEHHEECDC 98
DB 61 RPTQV-----QLRPVQVRKIEIVRKRPFKKAT-VTLEDHLACKC 99

RESULT 6
US-08-094-079-3
Sequence 3, Application US/08094079
Patent No. 5512545
GENERAL INFORMATION:
APPLICANT: COOK, Anne L
APPLICANT: CRAIG, Stewart
APPLICANT: CLEMENTS, John M
APPLICANT: EDWARDS, Richard M
APPLICANT: BROWN, David
TITLE OF INVENTION: PDGF-B ANALOGUES
NUMBER OF SEQUENCES: 22
CORRESPONDENCE ADDRESS:
ADDRESSEE: Allegretti & Witcoff, Ltd.
STREET: 10 S. Wacker Dr.
CITY: Chicago
STATE: Illinois
COUNTRY: USA
ZIP: 60606
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/094,079
FILING DATE: 24-JAN-1992
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB92/00141
FILING DATE: 24-JAN-1992
PRIOR APPLICATION DATA:

APPLICATION NUMBER: GB 9101645.1
FILING DATE: 24-JAN-1991
ATTORNEY/AGENT INFORMATION:
NAME: McDonnell, John J.
REGISTRATION NUMBER: 26,949
REFERENCE/DOCKET NUMBER: 93,640
TELEPHONE: 312-715-1000
TELEFAX: 312-715-1234
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
FEATURE:
NAME/KEY: Protein
LOCATION: 1..109
OTHER INFORMATION: /note= "Truncated PDGF-B with ARG
OTHER INFORMATION: 28 > SER (PDGF-B5)"
US-08-094-079-3

Query Match 17.6%; Score 105; DB 1; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEVRLSYCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQC 57
Db 7 IAEPMIAECKTTEVFEIS--RSLDRTNANFLWPPCPEVQRCSCG---CC--NNRNVCQ 60
QY 58 VPSKVTKYHEVLQLRP-----KTGV---RGLHKS LTDVALEHHECDC 98
Db 61 RPTQV-----QLRPQVQRKIEIVRKPIFKKAT-VTLEDHLACKC 99

RESULT 7
US-08-804-953-3
Sequence 3, Application US/08804953
Patent No. 5968778
GENERAL INFORMATION:
APPLICANT: Hoppe, Jurgen
APPLICANT: Welch, Herbert
TITLE OF INVENTION: PDGF-A, PDGF-AA, PDGF-AB,
TITLE OF INVENTION: PREPARATION PROCESS AND
TITLE OF INVENTION: PHARMACEUTICALS CONTAINING
TITLE OF INVENTION: THEM
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Joseph T. Eisele
ADDRESSEE: Kane, Dalsimer, Sullivan, Kurucz,
ADDRESSEE: Levy, Eisele and Richard
STREET: 711 Third Avenue
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10017-4059
COMPUTER READABLE FORM:
MEDIUM TYPE: 3-1/2" DISKETTE
COMPUTER: IBM-XT COMPATIBLE
OPERATING SYSTEM: DOS 3.3
SOFTWARE: WORDPERFECT 5.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/804,953
FILING DATE: 24-FEB-1997
CLASSIFICATION: 257
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/720,771
FILING DATE: 08/07/91
APPLICATION NUMBER: PCT/EP90/00063
FILING DATE: 01/11/90
ATTORNEY/AGENT INFORMATION:

NAME: EISELE, JOSEPH T.
REGISTRATION NUMBER: 25,331
REFERENCE/DOCKET NUMBER: 2727-56 PCT
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 687-6000
TELEFAX: (212) 682-3485
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 residues
TYPE: amino acid
STRANDEDNESS: N/A
TOPOLOGY: linear
MOLECULE TYPE: Protein
HYPOTHETICAL: Yes
ANTI-SENSE: No
FRAGMENT TYPE:
ORIGINAL SOURCE:
ORGANISM:
STRAIN: E. Coli
INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE:
HAPLOTYPE:
TISSUE TYPE:
CELL TYPE:
CELL LINE:
ORGANELLE:
IMMEDIATE SOURCE:
CLONE: PDGF-A
FEATURE:
OTHER INFORMATION:
US-08-804-953-3

Query Match 17.6%; Score 105; DB 2; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEVRLSYCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNECQC 57
Db 7 IAEPMIAECKTTEVFEIS--RSLDRTNANFLWPPCPEVQRCSCG---CC--NNRNVCQ 60
QY 58 VPSKVTKYHEVLQLRP-----KTGV---RGLHKS LTDVALEHHECDC 98
Db 61 RPTQV-----QLRPQVQRKIEIVRKPIFKKAT-VTLEDHLACKC 99

RESULT 8
US-08-691-794-4
Sequence 4, Application US/08691794
Patent No. 6057428
GENERAL INFORMATION:
APPLICANT: Keyt, Bruce A.
APPLICANT: Nguyen, Francis H.
APPLICANT: Ferrara, Napoleone
APPLICANT: Cunningham, Brian C.
APPLICANT: Wells, James A.
APPLICANT: Li, Bing
TITLE OF INVENTION: Variants of Vascular Endothelial Cell
TITLE OF INVENTION: Growth Factor, their Uses, and Processes for their
TITLE OF INVENTION: Production
NUMBER OF SEQUENCES: 45
CORRESPONDENCE ADDRESS:
ADDRESSEE: Flehr, Hobbach, Test, Albritton & Herbert
STREET: Four Embarcadero Center, Suite 3400
CITY: San Francisco
STATE: California
COUNTRY: United States
ZIP: 94111-4187
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/691,794
FILING DATE: 02-AUG-1996
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 60/002,827
FILING DATE: 25-AUG-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/567,200
FILING DATE: 05-DEC-1995
ATTORNEY/AGENT INFORMATION:
NAME: Dreger, Walter H.
REGISTRATION NUMBER: 24,190
REFERENCE/DOCKET NUMBER: A-63758/WHD
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 781-1989
TELEFAX: (415) 398-3249
TELEX: 910 277299
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: amino acid
STRANDEDNESS: unknown
TOPOLOGY: unknown
MOLECULE TYPE: protein
US-08-691-794-4

Query Match 17.6%; Score 105; DB 3; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEEVRLYSCPTRN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECQC 57
DB 7 IAEPMIAECKTTEVFEIS--RLIDRTNANFLVWPVPCVEVQRCSG---CC--NNRNVC 60

QY 58 VPSKVTKYHYEVLQLRP-----KTGV---RGLHKS LTDVALEHHEECDC 98
DB 61 RPTQV-----QLRPVQVRKIEIVRKPKFKKAT-VTLEDHLACKC 99

RESULT 9
PCT-US91-02766-18
Sequence 18, Application PC/TUS9102766
GENERAL INFORMATION:
APPLICANT: NASCIMENTO, CARLOS G.
APPLICANT: CALDERON-CACIA, MARIA D.
TITLE OF INVENTION: GLYCOSTYLATED PDGF
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
ADDRESSEE: Irell & Manella
STREET: 545 Middlefield Road, Suite 200
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US91/02766
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 07/515,474
FILING DATE: 26-APR-1990
ATTORNEY/AGENT INFORMATION:
NAME: ROBINS, ROBERTA L.
REGISTRATION NUMBER: 33,208
REFERENCE/DOCKET NUMBER: 2300-0105.40

TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 327-7250
TELEFAX: (415) 327-2951
TELEX: 706141
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: protein
PCT-US91-02766-18

Query Match 17.6%; Score 105; DB 5; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LTEEVRLYSCPTRN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECQC 57
DB 7 IAEPMIAECKTTEVFEIS--RLIDRTNANFLVWPVPCVEVQRCSG---CC--NNRNVC 60

QY 58 VPSKVTKYHYEVLQLRP-----KTGV---RGLHKS LTDVALEHHEECDC 98
DB 61 RPTQV-----QLRPVQVRKIEIVRKPKFKKAT-VTLEDHLACKC 99

RESULT 10
PCT-US93-02612-1
Sequence 1, Application PC/TUS9302612
GENERAL INFORMATION:
APPLICANT: Cable, Michael
APPLICANT: Hesson, Thomas
TITLE OF INVENTION: Monomeric Platelet-Derived Growth Factor and Prevention of
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:
ADDRESSEE: Schering-Plough Corporation
STREET: One Giraldi Farms
CITY: Madison
STATE: New Jersey
COUNTRY: USA
ZIP: 07940
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Apple Macintosh
OPERATING SYSTEM: Macintosh 6.0.5
SOFTWARE: Microsoft Word 4.00B
CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US93/02612
FILING DATE: 19930326
CLASSIFICATION:
PRIOR APPLICATION DATA: None
ATTORNEY/AGENT INFORMATION:
NAME: Lunn, Paul, G.
REGISTRATION NUMBER: 32,743
REFERENCE/DOCKET NUMBER: JB0255
TELECOMMUNICATION INFORMATION:
TELEPHONE: 201-822-7255
TELEFAX: 201-822-7039
TELEX: 219165
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 109 amino acids
TYPE: AMINO ACID
TOPOLOGY: linear
MOLECULE TYPE: peptide
PCT-US93-02612-1

Query Match 17.6%; Score 105; DB 5; Length 109;
Best Local Similarity 33.3%; Pred. No. 0.00019;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

; Sequence 2, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989,251
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Spruill, W. Murray
; REGISTRATION NUMBER: 32,943
; REFERENCE/DOCKET NUMBER: 5784-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919 420 2202
; TELEFAX: 919 881 3175
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 146 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-989-251-2

Query Match 17.6%; Score 105; DB 3; Length 146;
Best Local Similarity 33.3%; Pred. No. 0.00027;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVLRYSCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCQC 57
Db 44 IAEPAIMAECKTRTEVFEIS--RLIDRTNANFLWPPCVCVQRCSG---CC--NNRNVC 97
QY 58 VPSKVTKKYHEVLQLRP---KTGV---RGLHKSLTDVALEHHEECDC 98
Db 98 RPTQV-----QLRPQVRKIEIVRKPIFKKAT-VTLEDHLACKC 136

RESULT 15
US-08-989-251-25
; Sequence 25, Application US/08989251
; Patent No. 6017731
; GENERAL INFORMATION:
; APPLICANT: Tekamp-Olson, Patricia
; TITLE OF INVENTION: METHOD FOR EXPRESSION OF HETEROLOGOUS
; TITLE OF INVENTION: PROTEINS IN YEAST
; NUMBER OF SEQUENCES: 41
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Bell Seltzer IP Group of Alston & Bird, LLP
; STREET: 3605 Glenwood Ave. Suite 310
; CITY: Raleigh
; STATE: NC
; COUNTRY: US
; ZIP: 27622
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/989,251
; FILING DATE:
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Spruill, W. Murray
; REGISTRATION NUMBER: 32,943
; REFERENCE/DOCKET NUMBER: 5784-4
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919 420 2202
; TELEFAX: 919 881 3175
; INFORMATION FOR SEQ ID NO: 25:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 146 amino acids
; TYPE: amino acid
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-989-251-25

Query Match 17.6%; Score 105; DB 3; Length 146;
Best Local Similarity 33.3%; Pred. No. 0.00027;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVLRYSCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRCGNCACCLHNCQC 57
Db 44 IAEPAIMAECKTRTEVFEIS--RLIDRTNANFLWPPCVCVQRCSG---CC--NNRNVC 97
QY 58 VPSKVTKKYHEVLQLRP---KTGV---RGLHKSLTDVALEHHEECDC 98
Db 98 RPTQV-----QLRPQVRKIEIVRKPIFKKAT-VTLEDHLACKC 136

Search completed: May 24, 2002, 09:58:38
Job time: 142 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:56:36 ; Search time 16.43 Seconds
(without alignments)
619.931 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597
Sequence: 1 LITEVRLVYSCPTPRNFVSIVS.....DVALEHHECDVCRGSTGG 106

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283138 seqs, 96089334 residues

Total number of hits satisfying chosen parameters: 283138

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_71.*
1: pir1.*
2: pir2.*
3: pir3.*
4: pir4.*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------|
| 1 | 305.5 | 51.2 | 370 | 2 | JC7591 |
| 2 | 305.5 | 51.2 | 370 | 2 | JC7592 |
| 3 | 114.5 | 19.2 | 148 | 2 | D49530 |
| 4 | 108 | 18.1 | 166 | 2 | JN0248 |
| 5 | 108 | 18.1 | 198 | 2 | J50735 |
| 6 | 105 | 17.6 | 200 | 2 | I51551 |
| 7 | 105 | 17.6 | 215 | 2 | S08220 |
| 8 | 105 | 17.6 | 226 | 2 | I51550 |
| 9 | 105 | 17.6 | 241 | 1 | PFHUG2 |
| 10 | 105 | 17.6 | 245 | 1 | TVCTSS |
| 11 | 104.5 | 17.5 | 232 | 2 | A41551 |
| 12 | 104 | 17.4 | 196 | 2 | B28964 |
| 13 | 104 | 17.4 | 197 | 2 | S25096 |
| 14 | 104 | 17.4 | 211 | 1 | PFHUG1 |
| 15 | 104 | 17.4 | 226 | 1 | TVMVSS |
| 16 | 102.5 | 17.2 | 133 | 2 | B49530 |
| 17 | 102.5 | 17.2 | 190 | 2 | S21130 |
| 18 | 102.5 | 17.2 | 196 | 2 | A37359 |
| 19 | 102.5 | 17.2 | 196 | 2 | A48851 |
| 20 | 101.5 | 17.0 | 120 | 2 | A33787 |
| 21 | 101.5 | 17.0 | 146 | 2 | S57956 |
| 22 | 101.5 | 17.0 | 190 | 2 | B40080 |
| 23 | 100.5 | 16.8 | 419 | 2 | S69207 |
| 24 | 97 | 16.2 | 188 | 2 | JC4680 |
| 25 | 97 | 16.2 | 207 | 2 | JC4679 |
| 26 | 96.5 | 16.2 | 190 | 2 | A35987 |
| 27 | 95.5 | 16.0 | 190 | 2 | B44881 |
| 28 | 95.5 | 16.0 | 214 | 2 | A44881 |
| 29 | 94 | 15.7 | 225 | 2 | S25097 |

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metallothionein-11
protein F14N23.5 [

30 94 15.7 241 1 PMSGB
31 88 14.7 271 2 A25669
32 86 14.4 128 2 I51295
33 83.5 14.0 3020 2 A43932
34 80 13.4 158 2 A56125
35 79 13.2 149 2 A41236
36 77.5 13.0 3672 2 T23433
37 77.5 13.0 3704 2 T37316
38 75.5 12.6 108 2 G84522
39 74.5 12.5 167 2 G96828
40 72 12.1 171 2 S57894
41 71.5 12.0 3712 2 S18253
42 71 11.9 60 2 JC2420
43 71 11.9 82 2 T07076
44 71 11.9 82 2 T07114
45 71 11.9 1188 2 D86236

ALIGNMENTS

RESULT 1
JC7591
spinal cord-derived growth factor-B precursor - human
C:Species: Homo sapiens (man)
C:Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 24-Aug-2001
C:Accession: JC7591
R:Hamada, T.; Ui-Tei, K.; Imaki, J.; Miyata, Y.
Biochem. Biophys. Res. Commun. 280, 733-737, 2001
A:Title: Molecular cloning of SCDGF-B, a novel growth factor homologous to SCDGF/PDGF
A:Reference number: JC7591; MUID:21092670; PMID:11162582
A:Accession: JC7591
A:Molecule type: DNA
A:Residues: 1-370 <HAM>
A:Cross-references: DDBJ:AB033832
C:Genetics:
A:Gene: scdgf-b
F:1-17/Domain: secretory signal sequence #status predicted <SIG>
F:18-370/Product: spinal cord-derived growth factor-B #status predicted <MAT>
F:52-170/Region: CUB domain #status predicted
F:272-370/Region: homologous to platelet-derived growth factor/vascular endothelial g
F:294-308/Region: conserved motif #status predicted

Query Match 51.2%; Score 305.5; DB 2; Length 370;
Best Local Similarity 52.9%; Pred. No. 8.4e-23;
Matches 54; Conservative 13; Mismatches 32; Indels 3; Gaps 1;

Qy 2 LITEVRLVYSCPTPRNFVSIVSIRELKRDTDFWPGCLLVKRCGNCACCLHNCNCCQVPSK 61
Db 263 LNDADKRYSCPTPRNFVSIVSIRELKRDTDFWPGCLLVKRCGNCACCLHNCNCCQVPSK 322
Qy 62 VTKKYHVLQLRP---KTGVRGLHSLTDVALEHHECDVC 100
Db 323 TVKKYHVLQPEFGHIGKRRGKRAKTMALVDIQDHHERCDCIC 364

RESULT 2
JC7592
spinal cord-derived growth factor-B precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 30-Jun-2001 #sequence_revision 30-Jun-2001 #text_change 24-Aug-2001
C:Accession: JC7592
R:Hamada, T.; Ui-Tei, K.; Imaki, J.; Miyata, Y.
Biochem. Biophys. Res. Commun. 280, 733-737, 2001
A:Title: Molecular cloning of SCDGF-B, a novel growth factor homologous to SCDGF/PDGF
A:Reference number: JC7591; MUID:21092670; PMID:11162582
A:Contents: Fetal brain
A:Accession: JC7592
A:Molecule type: mRNA
A:Residues: 1-370 <HAM>
A:Cross-references: DDBJ:AB052170
C:Genetics:

A:Gene: sodgf-B
F:1-17/Domain: secretory signal sequence #status predicted <SIG>
F:18-370/Product: spinal cord-derived growth factor-B #status predicted <MAT>
F:52-170/Region: CUB domain #status predicted
F:272-370/Region: homologous to platelet-derived growth factor/vascular endothelial growth factor/vascular endothelial growth factor
F:294-308/Region: conserved motif #status predicted

Query Match 51.2%; Score 305.5; DB 2; Length 370;
Best Local Similarity 52.0%; Pred. No. 8.4e-23;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LFEVRLYSCTPRNFSVSI-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNEOCQVPSK 61

Db 263 LNDVVKRYSCTPRSHSVNLREELKLTNAVFPRCLLVQRGCGGTLNWKSCSSGK 322

QY 62 VTKKYEVLQLRP---KTGVRGLHKSLLTDVALEHHEECDCVC 100

Db 323 TVKKYHEVLKFEFGFKRKGAKNALVDIQLDHHRCDCIC 364

RESULT 3

D49530

10k vascular endothelial growth factor homolog A2R - Orf virus

C:Species: Orf virus

C>Date: 07-Apr-1994 #sequence_revision 18-Nov-1994 #text_change 08-Oct-1999

C:Accession: D49530

R:Lytile, D.J.; Fraser, K.M.; Fleming, S.B.; Mercer, A.A.; Robinson, A.J.

J. Virol. 68, 84-92, 1994

A:Title: Homologs of vascular endothelial growth factor are encoded by the poxvirus orf

A:Reference number: A49530; MUID:94076465

A:Contents: NZ7

A:Accession: D49530

A>Status: preliminary

A:Molecule type: DNA

A:Residues: 1-148 <LYT>

A:Cross-references: GB:S67522; NID:9456900; PIDN:AAH29223.1; PID:9456902

A:Note: sequence extracted from NCBI backbone (NCBIN:141422, NCBIPI:141426)

Query Match 19.2%; Score 114.5; DB 2; Length 148;

Best Local Similarity 30.2%; Pred. No. 0.00032;

Matches 29; Conservative 19; Mismatches 43; Indels 5; Gaps 3;

QY 11 CTPRNFVSIRBEL-KRTDTIFWPGCLLVKRCGGNCACCLHNCNEOCQVPSKTKYHEV 69

Db 46 CRPRDTVYLGEEYESTNLQINPRCVTVKRCSG---CCNGDQICTAVETNTVTYVSV 102

QY 70 LQLRPKTVGR-GLHKSLLTDVALEHHEECDCVCRGST 104

Db 103 TGVSSSGTNSGVSTNLQIRISVTEHTKDCIGRTTT 138

RESULT 4

JN0248

platelet-derived growth factor chain A3 precursor - rabbit (fragment)

C:Species: Oryctolagus cuniculus (domestic rabbit)

C>Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 27-Jun-1994

C:Accession: JN0248

R:Nakahara, K.; Nishimura, H.; Kuro-O, M.; Takekaki, S.; Iwase, M.; Ohkubo, A.; Yazaki,

Biochem. Biophys. Res. Commun. 184, 811-818, 1992

A:Title: Identification of three types of PDGF-A chain gene transcripts in rabbit vascular

A:Reference number: JN0248; MUID:92246970

A:Accession: JN0248

A:Molecule type: mRNA

A:Residues: 1-166 <NAK>

C:Superfamily: platelet-derived growth factor

F:1-22/Domain: propeptide (fragment) #status predicted <PRO>

F:23-166/Product: platelet-derived growth factor A3 chain #status predicted <MAT>

Query Match 18.1%; Score 108; DB 2; Length 166;

Best Local Similarity 32.3%; Pred. No. 0.0015;

Matches 32; Conservative 14; Mismatches 41; Indels 12; Gaps 6;

QY 11 CTPRNFVSIR-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNEOCQVPSKTKYKH 67

Db 31 CKTRTVIIEIPRSQVDPTSANFLINPPCVVEVKRCGT---CC--NTSSVKQPSRV---HH 82

QY 68 EYLQLRPKTGVGRGLHKSLLTDVALEHHEECDCVCRGSTGG 106

Db 83 RSVKVAKEVYVRKKPK-LKEVQVRLEEHLECAACAASAG 120

RESULT 5

JS0735

platelet-derived growth factor chain A1 precursor - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C>Date: 09-Oct-1992 #sequence_revision 09-Oct-1992 #text_change 27-Jun-1994

C:Accession: JS0735

R:Nakahara, K.; Nishimura, H.; Kuro-O, M.; Takekaki, S.; Iwase, M.; Ohkubo, A.; Yazaki,

Biochem. Biophys. Res. Commun. 184, 811-818, 1992

A:Title: Identification of three types of PDGF-A chain gene transcripts in rabbit vas

A:Reference number: JN0248; MUID:92246970

A:Accession: JS0735

A:Molecule type: mRNA

A:Residues: 1-198 <NAK>

A:Note: this protein corresponds to the endothelial type of human A chain

C:Superfamily: platelet-derived growth factor

F:1-20/Domain: signal sequence #status predicted <SIG>

F:21-89/Domain: propeptide #status predicted <PRO>

F:90-198/Product: platelet-derived growth factor A1 chain #status predicted <MAT>

Query Match 18.1%; Score 108; DB 2; Length 198;

Best Local Similarity 32.3%; Pred. No. 0.0018;

Matches 32; Conservative 14; Mismatches 41; Indels 12; Gaps 6;

QY 11 CTPRNFVSIR-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNEOCQVPSKTKYKH 67

Db 98 CKTRTVIIEIPRSQVDPTSANFLINPPCVVEVKRCGT---CC--NTSSVKQPSRV---HH 149

QY 68 EYLQLRPKTGVGRGLHKSLLTDVALEHHEECDCVCRGSTGG 106

Db 150 RSVKVAKEVYVRKKPK-LKEVQVRLEEHLECAACAASAG 187

RESULT 6

IS1551

platelet-derived growth factor A chain short form precursor - African clawed frog

C:Species: Xenopus laevis (African clawed frog)

C>Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999

C:Accession: IS1551

R:Mercola, M.; Melton, D.A.; Stiles, C.D.

Science 241, 1223-1225, 1988

A:Title: Platelet-derived growth factor A chain is maternally encoded in Xenopus embr

A:Reference number: IS1550; MUID:88321676

A:Accession: IS1551

A>Status: preliminary; translated from GB/EMBL/DDBJ

A:Molecule type: mRNA

A:Residues: 1-200 <MER>

A:Cross-references: GB:M23238; NID:g214650; PIDN:AAA49928.1; PID:g214651

C:Superfamily: platelet-derived growth factor

Query Match 17.6%; Score 105; DB 2; Length 200;

Best Local Similarity 31.4%; Pred. No. 0.0036;

Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTPRNFVSIR-REELKRTDTIF--WPGCLLVKRCGGNCACCLHNCNEOCQVPSKTKYKH 67

Db 101 CKTRTVIIEIPRSQVDPTSANFLINPPCVVEVKRCGT---CC--NTSSVKQPSRI---HH 152

QY 68 -----EVLQLRPKTGVGRGLHKSLLTDVALEHHEECDCVCRGST 104

Db 153 RSVKVAKEVYVRKKPK-----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 7

S08220

platelet-derived growth factor chain A precursor - African clawed frog

C:Species: Xenopus laevis (African clawed frog)

C:Date: 07-Sep-1990 #sequence_revision 07-Sep-1990 #text_change 16-Jul-1999

C:Accession: S08220

R:Bejcek, B.E.; Li, D.Y.; Deuel, T.F.

Nucleic Acids Res. 18, 680, 1990

A:Title: Nucleotide sequence of a cDNA clone of Xenopus platelet-derived growth factor A

A:Reference number: S08220; MUID:90175018

A:Accession: S08220

A>Status: translation not shown

A:Molecule type: mRNA

A:Residues: 1-215 <BEJ>

A:Cross-references: EMBL:X17545; NID:g64973; PIDN:CAA35583.1; PID:g64974

C:Superfamily: platelet-derived growth factor

C:Keywords: alternative splicing; growth factor

F:1-22/Domain: signal sequence #status predicted <SIG>

F:23-91/Domain: propeptide #status predicted <PRO>

F:92-215/Product: platelet-derived growth factor chain A #status predicted <WAT>

Query Match

Best Local Similarity 17.6%; Score 105; DB 2; Length 215;

Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTRPNFSVSI-REELKRTDTIF--WPGCLLVKRCGNCACCLHNCQCVPSKVTKKYH 67

DB 101 CKTRTWIYEIPRQIDPTSANFLINPVCVEVKRCTG---CC--NTSSVKQPSRI---HH 152

QY 68 -----EVLQRPKTGVRGLHKSITDVALEHHEECDCVCGST 104

DB 153 RSVKVAKEVVRKKPK-----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 8

I51550

platelet-derived growth factor A chain long form precursor - African clawed frog

C:Species: Xenopus laevis (African clawed frog)

C:Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 16-Jul-1999

C:Accession: I51550

R:Mercola, M.; Melton, D.A.; Stiles, C.D.

Science 241, 1223-1225, 1988

A:Title: Platelet-derived growth factor A chain is maternally encoded in Xenopus embryos

A:Reference number: I51550; MUID:88321676

A:Accession: I51550

A>Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: mRNA

A:Residues: 1-226 <MER>

A:Cross-references: GB:M23237; NID:g214648; PIDN:AAA49927.1; PID:g214649

C:Superfamily: platelet-derived growth factor

Query Match

Best Local Similarity 17.6%; Score 105; DB 2; Length 226;

Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

QY 11 CTRPNFSVSI-REELKRTDTIF--WPGCLLVKRCGNCACCLHNCQCVPSKVTKKYH 67

DB 101 CKTRTWIYEIPRQIDPTSANFLINPVCVEVKRCTG---CC--NTSSVKQPSRI---HH 152

QY 68 -----EVLQRPKTGVRGLHKSITDVALEHHEECDCVCGST 104

DB 153 RSVKVAKEVVRKKPK-----LKEVL--VRLEEHLECTCTANSNS 190

RESULT 9

PFHUG2

platelet-derived growth factor chain B precursor [validated] - human

N:Alternate names: PDGF-B-chain; PDGF-II; PDGF-related transforming protein (sis

C:Species: Homo sapiens (man)

C:Date: 18-Apr-1984 #sequence_revision 20-Sep-1984 #text_change 08-Dec-2000
C:Accession: A94276; A21024; A93366; A25141; A94271; A93308; A43499; S56115;
R:Josephs, S.F.; Ratner, L.; Clarke, M.F.; Westin, E.H.; Reitz, M.S.; Wong-Staal, F.
Science 225, 636-639, 1984
A:Title: Transforming potential of human c-sis nucleotide sequences encoding platelet
A:Reference number: A94276; MUID:84250225
A:Accession: A94276
A:Molecule type: DNA
A:Residues: 1-241 <JOS1>
A:Cross-references: GB:K01401; NID:g338206; PIDN:AAA60552.1; PID:g338209
R:Chiu, I.M.; Reddy, E.P.; Givol, D.; Robbins, K.C.; Tronick, S.R.; Aaronson, S.A.
Cell 37, 123-129, 1984
A:Title: Nucleotide sequence analysis identifies the human c-sis proto-oncogene as a
A:Reference number: A21024; MUID:84205633
A:Accession: A21024
A:Molecule type: DNA
A:Residues: 17-20, 'RQ', 22-241 <CHI>
A:Cross-references: GB:K01917; NID:g338197
R:Rao, C.D.; Igarashi, H.; Chiu, I.M.; Robbins, K.C.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 83, 2392-2396, 1986
A:Title: Structure and sequence of the human c-sis/platelet-derived growth factor 2 (
A:Reference number: A23532; MUID:86205961
A:Accession: A23532
A:Molecule type: mRNA
A:Residues: 1-241 <RAO1>
A:Cross-references: GB:M12783; GB:M16288; NID:g338210; PIDN:AAA60553.1; PID:g338211
R:Collins, T.; Ginsburg, D.; Boss, J.M.; Orkin, S.H.; Pober, J.S.
Nature 316, 748-750, 1985
A:Title: Cultured human endothelial cells express platelet-derived growth factor B ch
A:Reference number: A93366; MUID:85296313
A:Accession: A93366
A:Molecule type: mRNA
A:Residues: 1-241 <COL>
A:Cross-references: GB:X02811; NID:g35371; PIDN:CAA26579.1; PID:g35372
R:Weich, H.A.; Sebal, W.; Schairer, H.U.; Hoppe, J.
FEBS Lett. 198, 344-348, 1986
A:Title: The human osteosarcoma cell line U-2 OS expresses a 3.8 kilobase mRNA which
A:Reference number: A25141; MUID:86164981
A:Accession: A25141
A:Molecule type: mRNA
A:Residues: 26-241 <WEI>
A:Cross-references: GB:X03702; NID:g35374; PIDN:CAA27333.1; PID:g35375
R:Antoniadou, H.N.; Hunkapiller, M.W.
Science 220, 963-965, 1983
A:Title: Human platelet-derived growth factor (PDGF): amino-terminal amino acid sequ
A:Reference number: A94271; MUID:83197379
A:Accession: A94271
A:Molecule type: protein
A:Residues: 82-100, 'E', 102-104, 'C', 106, 'C', 108-110 <ANT>
R:Waterfield, M.D.; Scrase, G.T.; Whittle, N.; Stroobant, P.; Johnsson, A.; Wasteson,
Nature 304, 35-39, 1983
A:Title: Platelet-derived growth factor is structurally related to the putative trans
A:Reference number: A93308; MUID:83244981
A:Accession: A93308
A:Molecule type: protein
A:Residues: 82-112 <WAT>
R:Josephs, S.F.; Guo, C.; Ratner, L.; Wong-Staal, F.
Science 223, 487-491, 1984
A:Title: Human proto-oncogene nucleotide sequences corresponding to the transforming
A:Reference number: A43499; MUID:84097555
A:Accession: A43499
A>Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 'O', 22-241 <JOS2>
R:Lu, K.V.; Rohde, M.F.; Thomson, A.R.; Kenney, W.C.; Lu, H.S.
Biochem. J. 309, 411-417, 1995
A:Title: Mistranslation of a TGA termination codon as tryptophan in recombinant plate
A:Reference number: S56115; MUID:95351967
A:Accession: S56115
A>Status: preliminary
A:Molecule type: protein
A:Residues: 82-93 <JWS>
R:Rao, C.D.; Pech, M.; Robbins, K.C.; Aaronson, S.A.

Mol. Cell. Biol. 8, 284-292, 1988
A:Title: The 5' untranslated sequence of the c-sis/platelet-derived growth factor 2 trans
A:Reference number: I57635; MUID:88094398
A:Accession: I57635
A:Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-20 <RAO2>
A:Cross-references: GB:M19719; NID:g189727; PIDN:AAA60349.1; PID:g553608
R:Ratner, L.; Josephs, S.F.; Jarrett, R.; Reitz, M.S.
Nucleic Acids Res. 13, 5007-5018, 1985
A:Title: Nucleotide sequence of transforming human c-sis cDNA clones with homology to pl
A:Reference number: I37266; MUID:85269623
A:Accession: I37266
A:Status: translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 1-241 <RAT>
A:Cross-references: EMBL:X02744; NID:g30246; PIDN:CAA26524.1; PID:g30247
R:Johnson, A.; Heldin, C.H.; Wasteson, A.; Westermark, B.; Deuel, T.F.; Huang, J.S.; Se
EMBO J. 3, 921-928, 1984
A:Title: The c-sis gene encodes a precursor of the B chain of platelet-derived growth fa
A:Reference number: A55030; MUID:84236121
A:Accession: A55030
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 'SLSL', 17-20, 'RQ', 22-241 <JOH>
A:Cross-references: GB:X00556; GB:X00559; GB:X00560; GB:X00561; GB:X00562
R:Dirks, R.P.H.; Onnekink, C.; Jansen, H.J.; de Jong, A.; Bloemers, H.P.J.
Nucleic Acids Res. 23, 2815-2822, 1995
A:Title: A novel human c-sis mRNA species is transcribed from a promoter in c-sis intron
A:Reference number: S59382; MUID:95388493
A:Accession: S59383
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 'MFIMGL', 22-200 <DIR>
A:Cross-references: EMBL:X83705; NID:g951023; PIDN:CAA58679.1; PID:g951025
R:Cook, A.L.; Kirvin, P.M.; Craig, S.; Bawden, L.J.; Green, D.R.; Price, M.J.; Richards
Biochem. J. 281, 57-65, 1992
A:Title: Purification and analysis of proteinase-resistant mutants of recombinant plate
A:Reference number: I38108; MUID:92117992
A:Accession: I38108
A:Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: mRNA
A:Residues: 'M', 82-241 <COO>
A:Cross-references: EMBL:X63966; NID:g311378; PIDN:CAA4383.1; PID:g35377
A:Note: mutagenized recombinant sequence
C:Comment: Platelet-derived growth factor, a potent mitogen for cells of mesenchymal ori
C:Genetics:
A:Gene: GDB:PDGFB
A:Cross-references: GDB:120709; OMIM:190040
A:Map position: 22q12.3-22q13.1
A:Introns: 57/3; 94/1; 192/3; 241/1
C:Complex: homodimer; heterodimer (see PIR:PFHUG1)
C:Superfamily: platelet-derived growth factor
C:Keywords: growth factor; mitogen
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-81/Domain: amino-terminal propeptide #status predicted <PRO>
F:82-190/Product: platelet-derived growth factor chain B #status experimental <MAT>
F:159-163/Region: receptor binding #status predicted
F:191-241/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:97-141, 130-178, 134-180/disulfide bonds: #status experimental
F:124/disulfide bonds: interchain (to 133 in homodimeric form) #status experimental
F:124/disulfide bonds: interchain (to chain A-132 in heterodimeric form) #status predict
F:133/disulfide bonds: interchain (to 124 in homodimeric form) #status experimental
F:133/disulfide bonds: interchain (to chain A-124 in heterodimeric form) #status predict

Query Match 17.6%; Score 105; DB 1; Length 241;
Best Local Similarity 33.3%; Pred. No. 0.0042;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;
QY 2 LTEEVRLSCTPRN--FSVSIREELKRTDIF--WPGCLLVKRCGNCACCLHNECC 57
DB 88 IAEPMIAECKTTEVFEIS--RRLLDRTNANFLWPPCPEVQRCSG---CC---NNRNVC 141

QY 58 VPSKVTKYKHEVLQLRP----KTGV----RGLHKSLTDVALEHHECDC 98
DB 142 RPTQV-----QLRPVQVRKIEIVRKRP-----VFKKAT-VTLEDHLACKC 180

RESULT 10

TVCTSS

platelet-derived growth factor chain B precursor - cat
N:Alternate names: PDGF-related transforming protein
C:Species: Felis silvestris catus (domestic cat)
C:Date: 30-Jun-1989 #sequence_revision 30-Jun-1989 #text_change 31-Mar-1996
C:Accession: A26402
R:Van den Ouweland, A.M.W.; Van Groningen, J.J.M.; Schalken, J.A.; Van Neck, H.W.; B.

Nucleic Acids Res. 15, 959-970, 1987
A:Title: Genetic organization of the c-sis transcription unit.
A:Reference number: A26402; MUID:87146463
A:Accession: A26402
A:Molecule type: mRNA
A:Residues: 1-245 <VAN>
C:Genetics:
A:Gene: sis

C:Superfamily: platelet-derived growth factor

C:Keywords: glycoprotein; growth factor; platelet; proto-oncogene; transforming prot

F:1-20/Domain: signal sequence #status predicted <SIG>

F:21-81/Domain: propeptide #status predicted <PRO>

F:82-194/Product: platelet-derived growth factor chain B #status predicted <MAT>

F:163-167/Region: receptor binding #status predicted

F:63/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 17.6%; Score 105; DB 1; Length 245;

Best Local Similarity 33.0%; Pred. No. 0.0042;

Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;

QY 2 LTEEVRLSCTPRN--FSVSIREELKRTDIF--WPGCLLVKRCGNCACCLHNECC 57

DB 92 VAEPMIAECKTTEVFEIS--RRLLDRTNANFLWPPCPEVQRCSG---CC---NNRNVC 145

QY 58 VPSKVTKY-----HEVLQLRPKTVGRGLHKSLTDVALEHHECDC 98

DB 146 RPTQVQLRVQVRKIEIVRKRP-----VFKKAT-VTLEDHLACKC 184

RESULT 11

A41551

vascular endothelial growth factor 206 precursor - human

N:Alternate names: vascular permeability factor

C:Species: Homo sapiens (man)

C:Date: 28-Aug-1992 #sequence_revision 28-Aug-1992 #text_change 05-Nov-1999

C:Accession: A41551; C41551; A40454; B40454; A40079; A40080; JQ1463;

R:Houck, K.A.; Ferrara, N.; Winer, J.; Cachianes, G.; Li, B.; Leung, D.W.

Mol. Endocrinol. 5, 1806-1814, 1991

A:Title: The vascular endothelial growth factor family: identification of a fourth mo

A:Reference number: A41551; MUID:92168017

A:Accession: A41551

A:Molecule type: mRNA

A:Residues: 1-232 <HOU1>

A:Cross-references: GB:S85192; NID:9246155; PID:g246156

A:Accession: C41551

A:Status: nucleic acid sequence not shown

A:Molecule type: mRNA

A:Residues: 1-140, 'N', 183-232 <HOU2>

A:Accession: B41551

A:Status: nucleic acid sequence not shown; not compared with conceptual translation

A:Molecule type: mRNA

A:Residues: 1-141, 227-232 <HOU>

R:Tischer, E.; Mitchell, R.; Hartman, T.; Silva, M.; Gospodarowicz, D.; Fiddes, J.C.;

J. Biol. Chem. 266, 11947-11954, 1991

A:Title: The human gene for vascular endothelial growth factor. Multiple protein form

A:Reference number: A40454; MUID:91268072

A:Accession: A40454

A:Title: Conservation in sequence and affinity of human and rodent PDGF ligands and receptors
A:Reference number: S33764; MUID:93305723
A:Accession: S33764
A:Molecule type: mRNA
A:Residues: 89-172 <HRR2>
A:Cross-references: EMBL:114120
A:Superfamily: platelet-derived growth factor
C:Keywords: growth factor; mitogen; platelet

Query Match 17.4%; Score 104; DB 2; Length 197;
Best Local Similarity 34.0%; Pred. No. 0.0044;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;

QY 11 CTPRNFVSII-REELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECOCVPSKV---TK 64
DB 89 CKTRVIYIIPRSQVDPSTANFLIWPVPCVEVRCGTG---CC--NTSSVKCQPSRVHHRV 143

QY 65 KYHEVLQLRPKTVGRGLHKLSTLDVALEHHEECDC 98
DB 144 KVAKVEYVRKKPKLKEV-----QVRLEHLEACAC 172

RESULT 14
PHUG1
N:Alternate names: PDGF A-chain; PDGF-1; PDGF-A; platelet-derived growth factor 1
C:Species: Homo sapiens (man)
C:Date: 04-Dec-1986 #sequence_revision 04-Dec-1986 #text_change 18-Feb-2000
C:Accession: A28964; S47364; A42002; A01379; S00173; A28122
R:Bonthron, D.T.; Morton, C.C.; Orkin, S.H.; Collins, T.
Proc. Natl. Acad. Sci. U.S.A. 85, 1492-1496, 1988
A:Title: Platelet-derived growth factor A chain: gene structure, chromosomal location, and expression
A:Reference number: A28964; MUID:88144463
A:Accession: A28964
A:Molecule type: DNA
A:Residues: 1-211 <BON>
A:Cross-references: GB:M21571; GB:J03638; GB:M19984; GB:M19985; GB:M19986; GB:M19987; GB:M19988
R:Takimoto, Y.; Kuramoto, A.
Biochim. Biophys. Acta 1222, 511-514, 1994
A:Title: Gene regulation by the 5'-untranslated region of the platelet-derived growth factor A chain
A:Reference number: S47364; MUID:94312450
A:Accession: S47364
A>Status: Preliminary
A:Molecule type: DNA
A:Residues: 1-21 <TAK>
R:Bonthron, D.; Collins, T.; Grzeschik, K.H.; van Roy, N.; Speleman, F.
Genomics 13, 257-263, 1992
A:Title: Platelet-derived growth factor A chain: confirmation of localization of PDGFA to the 5'-untranslated region of the platelet-derived growth factor A chain
A:Reference number: A42002; MUID:92307656
A:Accession: A42002
A>Status: Preliminary; not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 152-211 <BON>
R:Betsholtz, C.; Johnson, A.; Heldin, C.H.; Westermark, B.; Lind, P.; Urdea, M.S.; Eddy, R.
Nature 320, 695-699, 1986
A:Title: cDNA sequence and chromosomal localization of human platelet-derived growth factor A chain
A:Reference number: A01379; MUID:86203630
A:Accession: A01379
A:Molecule type: mRNA
A:Residues: 1-211 <BET>
A:Cross-references: GB:X03795; NID:G35365; PIDN:CAA27421.1; PID:G35366
A:Experimental source: clonal glioma cell line U-343 MGAC12.6, a tumor cell line
R:Hoppe, J.; Schumacher, L.; Eichner, W.; Welch, H.A.
FEBS Lett. 223, 243-246, 1987
A:Title: The long 3'-untranslated regions of the PDGF-A and -B mRNAs are only distantly related
A:Reference number: S00173; MUID:88030061
A:Accession: S00173
A:Molecule type: mRNA
A:Residues: 1-193 'DVR' <HOP>
A:Cross-references: EMBL:X06374; NID:G35363; PIDN:CAA29677.1; PID:G35364
R:Rorsman, F.; Bywater, M.; Knott, T.J.; Scott, J.; Betsholtz, C.
Mol. Cell. Biol. 8, 571-577, 1988

A:Title: Structural characterization of the human platelet-derived growth factor A-c1
A:Reference number: A28122; MUID:88174698
A:Accession: A28122
A:Molecule type: mRNA
A:Residues: 1-63, 'TRD', 67-211 <ROR>
A:Cross-references: GB:M20488
A:Note: the authors translated the codon ACA for residue 64 as Arg, CGT for residue 64 as Arg, CGT for residue 64 as Arg, a potent mitogen for cells of mesenchymal origin
C:Comment: A carboxyl-terminal propeptide may be removed from the precursor by proteolysis
C:Genetics:
A:Gene: GDB:PDGFA
A:Cross-references: GDB:120266; OMIM:173430
A:Map position: 7p22-7p22
A:Introns: 21/3; 54/1; 89/1; 151/3; 194/1
C:Complex: homodimer; heterodimer (see PIR-PFHUG2)
C:Superfamily: platelet-derived growth factor
C:Keywords: alternative splicing; glycoprotein; growth factor; mitogen; platelet
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-86/Domain: propeptide #status predicted <PRO>
F:87-211/Product: platelet-derived growth factor chain A #status predicted <MAT>
F:158-162/Region: receptor binding #status predicted
F:96-140, 129-177, 133-179/Disulfide bonds: #status predicted
F:123/Disulfide bonds: interchain (to chain B-133 in heterodimeric form) #status predicted
F:123/Disulfide bonds: interchain (to 132 in homodimeric form) #status predicted
F:132/Disulfide bonds: interchain (to chain B-124 in heterodimeric form) #status predicted
F:132/Disulfide bonds: interchain (to 123 in homodimeric form) #status predicted
F:134/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 17.4%; Score 104; DB 1; Length 211;
Best Local Similarity 34.0%; Pred. No. 0.0047;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps 6;

QY 11 CTPRNFVSII-REELKRTDTIF--WPGCLLVKRCGNCACCLHNCNECOCVPSKV---TK 64
DB 96 CKTRVIYIIPRSQVDPSTANFLIWPVPCVEVRCGTG---CC--NTSSVKCQPSRVHHRV 150

QY 65 KYHEVLQLRPKTVGRGLHKLSTLDVALEHHEECDC 98
DB 151 KVAKVEYVRKKPKLKEV-----QVRLEHLEACAC 179

RESULT 15
TVMVS
PDGF-related transforming protein (sis) - simian sarcoma virus
N:Alternate names: p28-sis
C:Species: simian sarcoma virus
C:Date: 23-Jul-1983 #sequence_revision 20-Sep-1984 #text_change 31-Oct-1997
C:Accession: A01381
R:Devare, S.G.; Reddy, E.P.; Law, J.D.; Robbins, K.C.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 80, 731-735, 1983
A:Title: Nucleotide sequence of the simian sarcoma virus genome: demonstration that it is a member of the gamma-herpesvirus subfamily
A:Reference number: A03982; MUID:83144004
A:Accession: A01381
A:Molecule type: genomic RNA
A:Residues: 1-226 <DEV>
C:Genetics:
A:Gene: sis
C:Superfamily: platelet-derived growth factor
C:Keywords: growth factor; transforming protein
F:6-226/Domain: platelet-derived growth factor chain B similarity <PDG>

Query Match 17.4%; Score 104; DB 1; Length 226;
Best Local Similarity 33.3%; Pred. No. 0.005;
Matches 36; Conservative 12; Mismatches 34; Indels 26; Gaps 9;

QY 2 LFEVRLYSCTPRN--FSVSIREEKRTDTIF--WPGCLLVKRCGNCACCLHNCNECOC 57
DB 73 VAEPAMIAECKTRTEVFEIS--RLIDRTNANFLWVPCVEVRCSCG---CC--NNRNVC 126

QY 58 VPSKVTKYHYVQLRP-----KTGV---RGLHKLSTLDVALEHHEECDC 98
DB 151 KVAKVEYVRKKPKLKEV-----QVRLEHLEACAC 179

Db 127 RPTQV-----QLRPQVRKIEIVRKKPIFKAT-VTLEDHLACKC 165

Search completed: May 24, 2002, 09:59:01
Job time: 145 sec

GenCore version 4.5
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OM protein - protein search, using sw model

Run on: May 24, 2002, 09:58:41 ; Search time 11.84 Seconds
(without alignments)

346.645 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345

Perfect score: 597

Sequence: 1 LITEVRLYSCIPRNFVSI.....DVALEHHEDCVCRGSGTG 106

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 105224 seqs, 38719550 residues

Total number of hits satisfying chosen parameters: 105224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match | Length | DB ID | Description |
|------------|-------|-------------|--------|-------|-------------|
| 1 | 117.5 | 19.7 | 326 | 1 | VEGD_RAT |
| 2 | 115.5 | 19.3 | 358 | 1 | VEGD_MOUSE |
| 3 | 114.5 | 19.2 | 148 | 1 | VEGH_ORF7 |
| 4 | 111.5 | 18.7 | 354 | 1 | VEGD_HUMAN |
| 5 | 108.5 | 18.2 | 164 | 1 | VEGA_CAVPO |
| 6 | 108 | 18.1 | 213 | 1 | PDGA_RABIT |
| 7 | 105 | 17.6 | 207 | 1 | VEGB_HUMAN |
| 8 | 105 | 17.6 | 226 | 1 | PDGA_XENLA |
| 9 | 105 | 17.6 | 241 | 1 | PDGB_HUMAN |
| 10 | 105 | 17.6 | 245 | 1 | PDGB_FELCA |
| 11 | 104.5 | 17.5 | 232 | 1 | VEGA_HUMAN |
| 12 | 104 | 17.4 | 204 | 1 | PDGA_RAT |
| 13 | 104 | 17.4 | 211 | 1 | PDGA_HUMAN |
| 14 | 104 | 17.4 | 211 | 1 | PDGA_MOUSE |
| 15 | 104 | 17.4 | 226 | 1 | TSIS_SMSAV |
| 16 | 102.5 | 17.2 | 133 | 1 | VEGH_ORFN2 |
| 17 | 102.5 | 17.2 | 190 | 1 | VEGA_PIG |
| 18 | 102.5 | 17.2 | 214 | 1 | VEGA_CANFA |
| 19 | 102 | 17.1 | 207 | 1 | VEGB_BOVIN |
| 20 | 101.5 | 17.0 | 146 | 1 | VEGA_SHEEP |
| 21 | 101.5 | 17.0 | 190 | 1 | VEGA_BOVIN |
| 22 | 100.5 | 16.8 | 419 | 1 | VEGC_HUMAN |
| 23 | 99.5 | 16.7 | 415 | 1 | VEGC_MOUSE |
| 24 | 97.5 | 16.3 | 190 | 1 | VEGA_HORSE |
| 25 | 97 | 16.2 | 207 | 1 | VEGB_MOUSE |
| 26 | 96.5 | 16.2 | 214 | 1 | VEGA_RAT |
| 27 | 95.5 | 16.0 | 190 | 1 | VEGA_MESAU |
| 28 | 95.5 | 16.0 | 214 | 1 | VEGA_MOUSE |
| 29 | 94 | 15.7 | 135 | 1 | VEGB_RAT |
| 30 | 94 | 15.7 | 225 | 1 | PDGB_RAT |
| 31 | 94 | 15.7 | 241 | 1 | PDGB_MOUSE |
| 32 | 88.5 | 14.8 | 216 | 1 | VEGA_CHICK |
| 33 | 87 | 14.6 | 241 | 1 | PDGB_SHEEP |

| | | | | | |
|----|------|------|------|---|------------|
| 34 | 84 | 14.1 | 158 | 1 | PLGF_MOUSE |
| 35 | 83.5 | 14.0 | 5179 | 1 | MUC2_HUMAN |
| 36 | 80 | 13.4 | 158 | 1 | PGLF_RAT |
| 37 | 80 | 13.4 | 221 | 1 | PLGF_HUMAN |
| 38 | 77.5 | 13.0 | 3672 | 1 | LML2_CABEL |
| 39 | 73 | 12.2 | 60 | 1 | MTA_CHIHA |
| 40 | 73 | 12.2 | 60 | 1 | MTA_NOTCO |
| 41 | 73 | 12.2 | 60 | 1 | MTA_PAGBE |
| 42 | 73 | 12.2 | 60 | 1 | MTB_CHIHA |
| 43 | 73 | 12.2 | 60 | 1 | MTB_CHIHA |
| 44 | 73 | 12.2 | 60 | 1 | MTB_PAGBE |
| 45 | 73 | 12.2 | 60 | 1 | MT_PAGMA |

ALIGNMENTS

RESULT 1

| ID | VEGD_RAT | STANDARD; | PRT; | 326 AA. |
|----|--|-----------|------|---------|
| AC | O35251; | | | |
| DT | 01-MAR-2002 (Rel. 41, Created) | | | |
| DT | 01-MAR-2002 (Rel. 41, Last sequence update) | | | |
| DT | 01-MAR-2002 (Rel. 41, Last annotation update) | | | |
| DE | Vascular endothelial growth factor D precursor (VEGF-D) (c-fos induced growth factor) (FIGF). | | | |
| DE | FIGF OR VEGFD. | | | |
| GN | Rattus norvegicus (Rat). | | | |
| OS | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; | | | |
| OC | Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Rattus. | | | |
| OX | NCBI_TaxID=10116; | | | |
| RN | [1] | | | |
| RP | SEQUENCE FROM N.A. | | | |
| RC | STRAIN=Sprague-Dawley; | | | |
| RA | Yamada Y., Hirata Y., Nezu J., Shimane M.; | | | |
| RL | Submitted (JUL-1997) to the EMBL/GenBank/DBJ databases. | | | |
| CC | -!- FUNCTION: Growth factor active in angiogenesis, lymphangiogenesis and migration and also has effects on the permeability of blood vessels. May function in the formation of the venous and lymphatic vascular systems during embryogenesis, and also in the maintenance of differentiated lymphatic endothelium in adults. Binds and activates VEGFR-3 (Flt4) receptor (By similarity). | | | |
| CC | -!- SUBUNIT: Homodimer; non-covalent and antiparallel (By similarity). | | | |
| CC | -!- PTM: Undergoes a complex proteolytic maturation which generates a variety of processed secreted forms with increased activity toward VEGFR-3 and VEGFR-2. VEGF-D first form an antiparallel homodimer linked by disulfide bonds before secretion. The fully processed VEGF-D is composed mostly of two VEGF homology domains (VHDS) bound by non-covalent interactions (By similarity). | | | |
| CC | -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS. | | | |
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| DR | EMBL; AF014827; AAB66557.1; -- | | | |
| DR | HSSP; P15692; IVPF. | | | |
| DR | InterPro; IPR000072; PDGF. | | | |
| DR | Pfam; PF00341; PDGF; 1. | | | |
| DR | ProDom; PD001629; PDGF; 1. | | | |
| DR | SMART; SM00141; PDGF; 1. | | | |
| DR | PROSITE; PS00249; PDGF_1; 1. | | | |
| DR | PROSITE; PS0278; PDGF_2; 1. | | | |
| KW | Mitogen; Growth factor; Glycoprotein; Signal; Repeat; | | | |
| KW | Cleavage on pair of basic residues; Multigene family. | | | |
| FT | SIGNAL 1 21 POTENTIAL. | | | |
| FT | PROPEP 22 93 POTENTIAL. | | | |

| | | | | | | | | | |
|-----------------------|--|-----------------------------------|---|---|-----------------------|------------------|--------|------|----|
| Matches | 35; | Conservative | 15; | Mismatches | 41; | Indels | 15; | Gaps | 6; |
| QY | 1 | LTTEVRLVYSC | TRNFSVSIREEL-KRTD | TFWPGCLLVKRCGNCACCLHNCNECVCV-58 | | | | | |
| Db | 106 | VIDEEMQRTCS | PRETCVEVASEL | GLKTTNTFFKPPCVNFRCGG---CC--NEBGVMCMN160 | | | | | |
| QY | 59 | --PSKVT | KYKHYEVLQ | LPRTGVRLHKS | LTDVALEHHEECDCVCRG102 | | | | |
| Db | 161 | TSTSYISKOLF | FEISV--PLTSV--- | PELVPVKIANHTGCKCLPTG200 | | | | | |
| RESULT | 3 | | | | | | | | |
| VEGH_ORFN7 | | STANDARD; | | PRT; | 148 | AA. | | | |
| ID | P52585; | | | | | | | | |
| AC | 01-OCT-1996 | (Rel. 34, Created) | | | | | | | |
| DT | 01-OCT-1996 | (Rel. 34, Last sequence update) | | | | | | | |
| DT | 16-OCT-2001 | (Rel. 40, Last annotation update) | | | | | | | |
| DE | Vascular endothelial growth factor | homolog precursor. | | | | | | | |
| GN | AZR. | | | | | | | | |
| OS | Orf virus (strain N27) (OV NZ-7). | | | | | | | | |
| OC | Viruses; dsDNA viruses, no RNA stage; Poxviridae; Chordopoxvirinae; | | | | | | | | |
| OC | Parapoxvirus. | | | | | | | | |
| OX | NCBI_TaxID=73495; | | | | | | | | |
| RN | [1] | | | | | | | | |
| RP | SEQUENCE FROM N.A. | | | | | | | | |
| RX | MEDLINE=94076465; PubMed=8254780; | | | | | | | | |
| RT | Lytle D.J., Fraser K.M., Fleming S.B., Mercer A.A., Robinson A.J.; | | | | | | | | |
| RT | "Homologs of vascular endothelial growth factor are encoded by the | | | | | | | | |
| RT | poxvirus orf virus." | | | | | | | | |
| RT | J. Virol. 68:84-92(1994). | | | | | | | | |
| CC | -!- FUNCTION: INDUCES ENDOTHELIAL PROLIFERATION. | | | | | | | | |
| CC | -!- SUBUNIT: HOMODIMER; DISULFIDE-LINKED (BY SIMILARITY). | | | | | | | | |
| CC | -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS. | | | | | | | | |
| CC | ----- | | | | | | | | |
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| CC | entities requires a license agreement (See http://www.isb-sib.ch/announcement/ | | | | | | | | |
| CC | or send an email to license@isb-sib.ch). | | | | | | | | |
| CC | ----- | | | | | | | | |
| DR | EMBL; S67522; AAB29223.1; - | | | | | | | | |
| DR | HSP; P15692; 2VPF. | | | | | | | | |
| DR | InterPro; IPR000072; PDGF. | | | | | | | | |
| DR | Pfam; PF00341; PDGF; 1. | | | | | | | | |
| DR | ProDom; PD001629; PDGF; 1. | | | | | | | | |
| DR | SMART; SM00141; PDGF; 1. | | | | | | | | |
| DR | PROSITE; PS00249; PDGF_1; FALSE_NEG. | | | | | | | | |
| DR | PROSITE; PS0278; PDGF_2; 1. | | | | | | | | |
| KW | Mitogen; Growth factor; Glycoprotein; Signal. | | | | | | | | |
| FT | SIGNAL | 1 | 25 | POTENTIAL. | | | | | |
| FT | CHAIN | 26 | 148 | VASCULAR ENDOTHELIAL GROWTH FACTOR | | | | | |
| FT | | | | HOMOLOG. | | | | | |
| FT | DISULFID | 46 | 88 | BY SIMILARITY. | | | | | |
| FT | DISULFID | 77 | 130 | BY SIMILARITY. | | | | | |
| FT | DISULFID | 81 | 132 | BY SIMILARITY. | | | | | |
| FT | DISULFID | 71 | 71 | INTERCHAIN (BY SIMILARITY). | | | | | |
| FT | DISULFID | 80 | 80 | INTERCHAIN (BY SIMILARITY). | | | | | |
| FT | CARBOHYD | 95 | 95 | N-LINKED (GLCNAC. .) (POTENTIAL). | | | | | |
| FT | SEQUENCE | 148 | AA; | 16078 | MM; | FOEI3BA104CC73F8 | CRC64; | | |
| SQL | | | | | | | | | |
| Query Match | | | 19.2%; | Score | 114.5; | DB 1; | Length | 148; | |
| Best Local Similarity | | | 30.2%; | Pred. No. | 2.7e-05; | | | | |
| Matches | 29; | Conservative | 19; | Mismatches | 43; | Indels | 5; | Gaps | 3; |
| QY | 11 | CTPRNFSVSIREEL-KRTD | TFWPGCLLVKRCGNCACCLHNCNECVCVPSKVTKKYHEV69 | | | | | | |
| Db | 46 | CKPRDVT | VILGEYPPSTNIQY | NPRTVTRKCSG---CCNGDGOICITAVERTVTVSV102 | | | | | |
| QY | 70 | LQLRPRTGVR-GLHKS | LTDVALEHHEECDCVCRGST104 | | </ | | | | |

| | |
|------------|---|
| RESULT | 5 |
| VEGA_CAVPO | |
| ID | VEGA_CAVPO |
| AC | STANDARD; |
| DC | P26617; |
| DT | 01-AUG-1992 (Rel. 23, Created) |
| DT | 01-AUG-1992 (Rel. 23, Last sequence update) |
| DT | 01-MAR-2002 (Rel. 41, Last annotation update) |
| DE | Vascular endothelial growth factor A (VEGF-A) (Vascular permeability factor) (VPF). |
| DE | VEGF OR VEGFA. |
| GN | GN |
| OS | Cavia porcellus (Guinea pig). |
| OC | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; |

| | |
|------------|--|
| RESULT | 6 |
| PDGA_RABIT | |
| ID | PDGA_STANDARD; PRT; 213 AA. |
| AC | P34007; |
| DT | 01-FEB-1994 (Rel. 28, Created) |
| DT | 01-FEB-1994 (Rel. 28, Last sequence update) |
| DT | 01-MAR-2002 (Rel. 41, Last annotation update) |
| DE | Platelet-derived growth factor, A chain precursor (PDGF A-chain) |
| DE | {PDGF-1}. |
| PGFA. | |
| GN | PDGFA. |
| OS | Oryctolagus cuniculus (Rabbit). |
| OC | Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi |
| OC | Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus. |
| OX | NCBI_TaxID=9986; |
| RN | [1] |
| RC | SEQUENCE FROM N.A. |
| RP | TISSUE=Vascular smooth muscle; |

KW Mitogen; Growth factor; Glycoprotein; Signal; Heparin-binding;
 KW Alternative splicing; Multigene family.
 FT SIGNAL 1 21 POTENTIAL.
 FT CHAIN 22 207 VASCULAR ENDOTHELIAL GROWTH FACTOR B.
 FT DISULFID 47 89 BY SIMILARITY.
 FT DISULFID 78 122 BY SIMILARITY.
 FT DISULFID 82 124 BY SIMILARITY.
 FT DISULFID 72 72 INTERCHAIN (BY SIMILARITY).
 FT DISULFID 81 81 INTERCHAIN (BY SIMILARITY).
 FT VARSPPLIC 137 188 RAATPHRPOPSRVPWDSAPGADITHPTAPGPSAH
 FT RRSELRGCGRGLELNPDPCRKLRR (IN ISOFORM
 FT VEGF-B167).
 FT VARSPPLIC 189 207 MISSING (IN ISOFORM VEGF-B167).
 SQ SEQUENCE 207 AA; 21602 MW; EDE4B1C0DFDAD6BC CRC64;

Query Match 17.6%; Score 105; DB 1; Length 207;
 Best Local Similarity 30.0%; Pred. NO. 0.00037;
 Matches 27; Conservative 17; Mismatches 34; Indels 12; Gaps 4;

Qy 10 SCTPRNFSVSTREELKRT-DTIFWPGCLLYKRCGNCACCLHNCNECOCVPSKVTKYHE 68
 Db 46 TCQPREVVPLVLMGTAVKQVPSVTVQRCGG---CCPD--DGLECVPGQHVQRMQ 100
 Qy 69 VLQRPKGTGVRGLHKSITDVALEHHECDC 98
 Db 101 ILMIRYPS-----SQLGEMSLERHSQCEC 124

RESULT 8
 PDGA_XENLA STANDARD; PRT; 226 AA.
 AC P13698;
 DT 01-JAN-1990 (Rel. 13, Created)
 DT 01-JAN-1990 (Rel. 13, Last sequence update)
 DT 01-MAR-2002 (Rel. 41, Last annotation update)
 DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)
 DE (PDGFA).
 OS Xenopus laevis (African clawed frog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipiloidea; Pipidae;
 OC Xenopodinae; Xenopus.
 OX NCBI_TaxID=8355;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Oocyte;
 RX MEDLINE=88321676; PubMed=3413486;
 RA Mercola M., Melton D.A., Stiles C.D.;
 RT "Platelet-derived growth factor A chain is maternally encoded in
 RT xenopus embryos.";
 RL Science 241:1223-1225(1988).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Oocyte;
 RX MEDLINE=90175018; PubMed=2308861;
 RA Bejcek B.E., Li D.Y., Deuel T.F.;
 RT "Nucleotide sequence of a cDNA clone of xenopus platelet-derived
 RT growth factor A-chain";
 RL Nucleic Acids Res. 18:680-680(1990).
 CC -1- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
 CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
 CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
 CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
 CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
 CC -1- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
 CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
 CC TRANSFORMATION PROCESSES.
 CC -1- ALTERNATIVE PRODUCTS: 2 isoforms: a long form (shown here) and a
 CC short form; are produced by alternative splicing.
 CC -1- DOMAIN: The long form contains a basic insert which acts as a cell
 CC retention signal.
 CC -1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE

CC PDGF RECEPTOR.
 CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
 CC -----
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 CC -----
 CC EMBL; M23237; AAA49927.1; -;
 DR EMBL; M23238; AAA49928.1; -;
 DR EMBL; X17545; CAA35583.1; -;
 DR PIR; S08220; S08220.
 DR HSP; P01127; 1PDG.
 DR InterPro; IPR002400; GF_cysknot.
 DR InterPro; IPR000072; PDGF.
 DR Pfam; PF00341; PDGF; 1.
 DR PRINTS; PR00438; GFCYSKNOT.
 DR PRODOM; PD01629; PDGF; 1.
 DR SMART; SM00141; PDGF; 1.
 DR PROSITE; PS00249; PDGF_1; 1.
 DR PROSITE; PS02078; PDGF_2; 1.
 KW Glycoprotein; Mitogen; Growth factor; Platelet; Alternative splicing;
 KW Signal.
 FT SIGNAL 1 22
 FT PROPEP 23 91 REMOVED BY PROTEOLYSIS.
 FT CHAIN 92 226 PLATELET-DERIVED GROWTH FACTOR, A CHAIN.
 FT DISULFID 101 145 BY SIMILARITY.
 FT DISULFID 134 182 BY SIMILARITY.
 FT DISULFID 138 184 BY SIMILARITY.
 FT DISULFID 128 128 INTERCHAIN (BY SIMILARITY).
 FT DISULFID 137 137 INTERCHAIN (BY SIMILARITY).
 FT CARBOHYD 139 139 N-LINKED (GLCNAC...) (PROBABLE).
 FT VARSPPLIC 198 200 GFF -> DVR (IN SHORT ISOFORM).
 FT VARSPPLIC 201 226 MISSING (IN SHORT ISOFORM).
 FT CONFLICT 199 209 MISSING (IN REF. 2).
 FT CONFLICT 218 218 Q -> R (IN REF. 2).
 SQ SEQUENCE 226 AA; 25719 MW; E3E724FCF67C2FB2 CRC64;

Query Match 17.6%; Score 105; DB 1; Length 226;
 Best Local Similarity 31.4%; Pred. NO. 0.0004;
 Matches 33; Conservative 14; Mismatches 32; Indels 26; Gaps 8;

Qy 11 CTPRNFSVSI-REELKRTDTIF-WPGCLLYKRCGNCACCLHNCNECOCVPSKVTKYKH 67
 Db 101 CKTRTVIIEIPRSQIDPTSANFLIWPCCVEVKRCTG---CC--NTSSVKCQPSRI---HH 152
 Qy 68 -----EVLQRPKGTGVRGLHKSITDVALEHHECDCVCRGST 104
 Db 153 RSVKVAKEVYVRKKPK-----LKEVL--VRLEHLECTCTANSNS 190

RESULT 9
 PDGB_HUMAN STANDARD; PRT; 241 AA.
 AC P01127; P78431;
 DT 21-JUL-1986 (Rel. 01, Created)
 DT 21-JUL-1986 (Rel. 01, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Platelet-derived growth factor, B chain precursor (PDGF B-chain)
 DE (PDGF-2) (C-sis) (Becaplermin).
 GN PDGFB OR SIS.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=84250225; PubMed=6740330;
 RA Josephs S.F., Ratner L., Clarke M.F., Westin E.H., Reitz M.S.,

RA Wong-Staal F.;
RT "transforming potential of human c-sis nucleotide sequences encoding
RL platelet-derived growth factor.";
RN Science 225:636-639(1984).
[2]
RP SEQUENCE FROM N.A.
RX MEDLINE=86205961; PubMed=3517869;
RA Rao C.D., Igarashi H., Chiu I.-M., Robbins K.C., Aaronson S.A.;
RT "Structure and sequence of the human c-sis/platelet-derived growth
RL factor 2 (STS/PDGF2) transcriptional unit.";
RN Proc. Natl. Acad. Sci. U.S.A. 83:2392-2396(1986).
[3]
RP SEQUENCE OF 22-241 FROM N.A.
RX MEDLINE=84205633; PubMed=6327048;
RA Chiu I.-M., Reddy E.P., Givol D., Robbins K.C., Tronick S.R.,
RA Aaronson S.A.;
RT "Nucleotide sequence analysis identifies the human c-sis
RL proto-oncogene as a structural gene for platelet-derived growth
RT factor.";
RN Cell 37:123-129(1984).
[4]
RP SEQUENCE FROM N.A.
RX MEDLINE=85296313; PubMed=4033772;
RA Collins T., Ginsburg D., Ross J.M., Orkin S.H., Pober J.S.;
RT "Cultured human endothelial cells express platelet-derived growth
RL factor B chain: cDNA cloning and structural analysis.";
RN Nature 316:748-750(1985).
[5]
RP SEQUENCE FROM N.A.
RX MEDLINE=85269623; PubMed=2991848;
RA Ratner L., Josephs S.F., Jarrett R., Reitz M.S., Wong-Staal F.;
RT "Nucleotide sequence of transforming human c-sis cDNA clones with
RL homology to platelet-derived growth factor.";
RN Nucleic Acids Res. 13:5007-5018(1985).
[6]
RP SEQUENCE FROM N.A.
RX MEDLINE=87217119; PubMed=3472769;
RA Rao C.D., Igarashi H., Pech M.W., Robbins K.C., Aaronson S.A.;
RT "Oncogenic potential of the human platelet-derived growth factor
RL transcriptional unit.";
RN Cold Spring Harb. Symp. Quant. Biol. 51:959-966(1986).
[7]
RP SEQUENCE FROM N.A.
RA Burgess J., Odell C.;
RL Submitted (OCT-1996) to the EMBL/GenBank/DBJ databases.
[8]
RP SEQUENCE OF 1-53 FROM N.A.
RX MEDLINE=97141927; PubMed=8988177;
RA Simon M.P., Pedoutour F., Sirvent N., Grosgeorge J., Minioletti F.,
RA Colindre J.-M., Terrier-Lacombe M.-J., Mandahl N., Craver R.D.,
RA Blin N., Sozzi G., Turc-Carel C., O'Brien K.P., Kedra D.,
RA Fransson I., Guilbaud C., Dumanski J.P.;
RT "Deregulation of the platelet-derived growth factor B-chain gene via
RL fusion with collagen gene COL1A1 in dermatofibrosarcoma protuberans
RL and giant-cell fibroblastoma.";
RN Nat. Genet. 15:95-98(1997).
[9]
RP SEQUENCE OF 26-241 FROM N.A.
RX MEDLINE=86164981; PubMed=3456904;
RA Welch H.A., Seibald W., Schairer H.U., Hoppe J.;
RT "The human osteosarcoma cell line U-2 OS expresses a 3.8.kilobase
RL mRNA which codes for the sequence of the PDGF-B chain.";
RN FEBS Lett. 198:344-348(1986).
[10]
RP SEQUENCE OF 153-200 FROM N.A., AND PARTIAL SEQUENCE.
RX MEDLINE=84236121; PubMed=6329745;
RA Johnson A., Helden C.H., Wasteson A., Westermark B., Deuel T.F.,
RA Huang J.S., Seeborg P.H., Gray A., Ullrich A., Scraze G.,
RA Stroobant P., Waterfield M.D.;
RT "The c-sis gene encodes a precursor of the B chain of
RL platelet-derived growth factor.";
RN EMBO J. 3:921-928(1984).
[11]
RP SEQUENCE OF 82-110.
RX MEDLINE=83197379; PubMed=6844921;
RA Antonlades H.N., Hunkapiller M.W.;
RT "Human platelet-derived growth factor (PDGF): amino-terminal amino
RL acid sequence.";
RN Science 220:963-965(1983).
[12]
RP SEQUENCE OF 82-112.
RX MEDLINE=83244981; PubMed=6306471;
RA Waterfield M.D., Scraze G.T., Whittle N., Stroobant P., Johnson A.,
RA Wasteson A., Westermark B., Helden C.H., Huang J.S., Deuel T.F.;
RT "Platelet-derived growth factor is structurally related to the
RL putative transforming protein p28sis of simian sarcoma virus.";
RN Nature 304:35-39(1983).
[13]
RP MUTAGENESIS, AND IMPORTANCE OF ARG-108 AND ILE-111 FOR RECEPTOR
BINDING.
RX MEDLINE=92097530; PubMed=1661670;
RA Clements J.M., Bawden L.J., Bloxidge R.E., Catlin G., Cook A.L.,
RA Craig S., Drummond A.H., Edwards R.M., Fallon A., Green D.R.,
RA Hellewell P.G., Kirwin P.M., Nayee P.D., Richardson S.J., Brown D.,
RA Chahwala S.B., Snarey M., Winslow D.;
RT "Two PDGF-B chain residues, arginine 27 and isoleucine 30, mediate
RL receptor binding and activation.";
RN EMBO J. 10:4113-4120(1991).
[14]
RP INTERCHAIN DISULFIDE BONDS.
RX MEDLINE=92283833; PubMed=1317862;
RA Andersson M., Oestman A., Baekstroem G., Hellman U.,
RA George-Nascimento C., Westermark B., Helden C.H.;
RT "Assignment of interchain disulfide bonds in platelet-derived growth
RL factor (PDGF) and evidence for agonist activity of monomeric PDGF.";
RN J. Biol. Chem. 267:11260-11266(1992).
[15]
RP X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS).
RX MEDLINE=93010987; PubMed=1396586;
RA Oefner C., D'Arcy A., Winkler F.K., Eggmann B., Hosang M.;
RT "Crystal structure of human platelet-derived growth factor BB.";
RN EMBO J. 11:3921-3926(1992).
CC -!- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
CC -!- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
CC TRANSFORMATION PROCESSES.
CC -!- PHARMACEUTICAL: Available under the name Regranex (Ortho-McNeil).
CC Used to promote healing in diabetic neuropathic foot ulcers.
CC -!- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
CC PDGF RECEPTOR.
CC -!- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
CC -!- DATABASE: NAME-R&D Systems' cytokine source book: PDGF;
CC WWW="http://www.rndsystems.com/asp/g_sitebuilder.asp?bodyId=220".
CC -!- DATABASE: NAME-Regranex; NOTE-Clinical information on Regranex;
CC WWW="http://www.regranex.com/".

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DR EMBL; K01401; AAA60552.1; -
DR EMBL; K01918; AAA60552.1; JOINED.
DR EMBL; J00121; AAA60552.1; JOINED.
DR EMBL; K01398; AAA60552.1; JOINED.
DR EMBL; K01399; AAA60552.1; JOINED.
DR EMBL; K01400; AAA60552.1; JOINED.
DR EMBL; X02811; CAA26579.1; -
DR EMBL; M12783; AAA60553.1; -

```

[2]
RN REVISIONS.
RA van den Ouweland A.M.W.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: PLATELET-DERIVED GROWTH FACTOR IS A POTENT MITOGEN FOR
CC CELLS OF MESENCHYMAL ORIGIN. BINDING OF THIS GROWTH FACTOR TO ITS
CC AFFINITY RECEPTOR ELICITS A VARIETY OF CELLULAR RESPONSES. IT IS
CC RELEASED BY PLATELETS UPON WOUNDING AND PLAYS AN IMPORTANT ROLE
CC IN STIMULATING ADJACENT CELLS TO GROW AND THEREBY HEAL THE WOUND.
CC -1- SUBUNIT: ANTIPARALLEL DISULFIDE-LINKED DIMER OF NONIDENTICAL (A
CC AND B) CHAINS. HOMODIMERS OF A AND B CHAINS ARE IMPLICATED IN
CC TRANSFORMATION PROCESSES.
CC -1- MISCELLANEOUS: A-A AND B-B, AS WELL AS A-B, DIMERS CAN BIND TO THE
CC PDGF RECEPTOR.
CC -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
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CC
CC EMBL; X05112; CAA28758.1; ALT_SEQ.
CC
DR DR PIR; A26402; TVCTSS.
DR DR HSSP; P01127; IPDG.
DR DR InterPro; IPR002400; GF_cyskn0t.
DR DR InterPro; IPR000072; PDGF.
DR DR Pfam; PF00341; PDGF; 1.
DR DR PRINTS; PR00438; GFCYSKN0T.
DR DR ProDom; PD001629; PDGF; 1.
DR DR SMART; SM00141; PDGF; 1.
DR DR PROSITE; PS00249; PDGF_1; 1.
DR DR PROSITE; PSS0278; PDGF_2; 1.
DR DR Mitogen; Growth factor; Proto-oncogene; Platelet; Signal.
KW SIGNAL 1 20
FT PROPEP 21 81
FT CHAIN 82 194
FT PROPEP 195 245
FT DISULFID 101 145
FT DISULFID 134 182
FT DISULFID 138 184
FT DISULFID 128 128
FT DISULFID 137 137
SQ SEQUENCE 245 AA; 27787 MW; E7715291D9837312 CRC64;
Query Match 17.6%; Score 105; DB 1; Length 245;
Best Local Similarity 33.0%; Pred. No. 0.00043;
Matches 35; Conservative 13; Mismatches 36; Indels 22; Gaps 8;
QY 2 LTEVRLYSCTPRN--FSVSIREELKRTDTIF--WPGCLLVKRGCGNCAACLLHNCNEQC 57
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 92 VAEPMATAECKTRTEVPEVS--RLIDRTNANFLWVPCEVQRCSG---CC--NNRNVC 145
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
QY 58 VPSKVTKY-----HEVLQRPKTVGRGLKSLTDVALEHHECDC 98
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 146 RPTQVQLRLVQVRKIEVRKP-----VFKKAT-VTLEDHLACKC 184
: : : : : : : : : : : : : : : : : : : : : : : : : : : :
RESULT 11
VEGA_HUMAN
ID VEGA_HUMAN STANDARD; PRT; 232 AA.
AC P15692; Q16889; O60720; O75875; Q9UL23; Q9UH58; Q9HIW9; Q9HIW8;
DT 01-APR-1990 (Rel. 14, Created)
DT 01-MAR-2002 (Rel. 41, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Vascular endothelial growth factor A precursor (VEGF-A) (Vascular
DE permeability factor) (VPF).
GN VEGF OR VEGFA.
OS Homo sapiens (human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

```

OC Mammalia: Eutheria; Primates; Catarrhini; Hominiidae; Homo.
OX NCBI_TaxID=9606;
[1]
RP SEQUENCE FROM N.A. (ISOFORMS VEGF189 AND VEGF165).
RX MEDLINE=90069608; PubMed=2479986;
RA Leung D.W., Cachianes G., Kuang W.-J., Goeddel D.V., Ferrara N.;
RT "Vascular endothelial growth factor is a secreted angiogenic
mitogen.";
RL Science 246:1306-1309(1999).
[2]
RP SEQUENCE FROM N.A. (ISOFORM VEGF189), AND PARTIAL SEQUENCE.
RX MEDLINE=90069609; PubMed=2479987;
RA Keck P.J., Hauser S.D., Krivi G., Sanzo K., Warren T., Feder J.,
Connolly D.T.;
RT "Vascular permeability factor, an endothelial cell mitogen related to
PDGF.";
RL Science 246:1309-1312(1989).
[3]
RP SEQUENCE FROM N.A. (ISOFORM VEGF189).
RX MEDLINE=91268072; PubMed=1711045;
RA Tischer E., Mitchell R., Hartman T., Silva M., Gospodarowicz D.,
Fiddes J.C., Abraham J.A.;
RT "The human gene for vascular endothelial growth factor. Multiple
protein forms are encoded through alternative exon splicing.";
RL J. Biol. Chem. 266:11947-11954(1991).
[4]
RP SEQUENCE FROM N.A. (ISOFORM VEGF206).
RX MEDLINE=92168017; PubMed=1791831;
RA Houck K.A., Ferrara N., Winer J., Cachianes G., Li B., Leung D.W.;
RT "The vascular endothelial growth factor family: identification of a
fourth molecular species and characterization of alternative splicing
of RNA.";
RL Mol. Endocrinol. 5:1806-1814(1991).
[5]
RP SEQUENCE FROM N.A. (ISOFORM VEGF165).
RX MEDLINE=92231879; PubMed=1567395;
RA Weindel K., Marne D., Welch H.A.;
RT "AIDS-associated Kaposi's sarcoma cells in culture express vascular
endothelial growth factor.";
RL Biochem. Biophys. Res. Commun. 183:1167-1174(1992).
[6]
RP SEQUENCE FROM N.A. (ISOFORM VEGF145).
RX MEDLINE=97207275; PubMed=9054410;
RA Poltorak Z., Cohen T., Sivan R., Kandelis Y., Spira G., Vlodavsky I.,
Keshet E., Neufeld G.;
RT "VEGF145, a secreted vascular endothelial growth factor isoform that
binds to extracellular matrix.";
RL J. Biol. Chem. 272:7151-7158(1997).
[7]
RP SEQUENCE FROM N.A. (ISOFORM VEGF183).
RC TISSUE=Kidney;
RX MEDLINE=99096474; PubMed=9878851;
RA Lei J., Jiang A., Pei D.;
RT "Identification and characterization of a new splicing variant of
vascular endothelial growth factor: VEGF183.";
RL Biochim. Biophys. Acta 1443:400-406(1998).
[8]
RP SEQUENCE FROM N.A. (ISOFORM VEGF165).
RC TISSUE=Breast;
RX MEDLINE=98119755; PubMed=9450968;
RA Claffey K.P., Shih S.-C., Mullen A., Dziennis S., Cusick J.L.,
Abrams K.R., Lee S.W., Detmar M.;
RT "Identification of a human VPF/VEGF 3' untranslated region mediating
hypoxia-induced mRNA stability.";
RL Mol. Biol. Cell 9:469-481(1998).
[9]
RP SEQUENCE OF 114-209 FROM N.A. (ISOFORM VEGF183).
RC TISSUE=Retina;
RX MEDLINE=99165303; PubMed=10067980;
RA Jingjing L., Xue Y., Agarwal N., Roque R.S.;
RT "Human Muller cells express VEGF183, a novel spliced variant of
vascular endothelial growth factor.";
RL Invest. Ophthalmol. Vis. Sci. 40:752-759(1999).

[10]
RP SEQUENCE FROM N.A. (ISOFORM VEGF165).
RC TISSUE=Hemangioendothelioma;
RA Murata H., Fukushima J., Hattori S., Okuda K., Yanagi H.;
RT "Human cDNA for the vascular endothelial growth factor isoform
VEGF165.";
RL Submitted (DEC-1998) to the EMBL/GenBank/DBJ databases.
[11]
RP SEQUENCE FROM N.A. (ISOFORM VEGF148).
RC TISSUE=Renal glomerulus;
RX MEDLINE=99394945; PubMed=10464055;
RA Whittle C.J., Gillespie K.M., Harrison R., Mathieson P.W.,
Harper S.J.;
RT "Heterogeneous vascular endothelial growth factor (VEGF) isoform mRNA
and receptor mRNA expression in human glomeruli, and the
identification of VEGF148 mRNA, a novel truncated splice variant.";
RL Clin. Sci. 97:303-312(1999).
[12]
RP SEQUENCE FROM N.A. (ISOFORM VEGF121).
RA Sato J.D., Whitney R.G.;
RT "Human cDNA for vascular endothelial growth factor isoform VEGF121.";
RL Submitted (DEC-1999) to the EMBL/GenBank/DBJ databases.
[13]
RP SEQUENCE FROM N.A.
RA Williams S.;
RL Submitted (DEC-2000) to the EMBL/GenBank/DBJ databases.
[14]
RP PRELIMINARY SEQUENCE OF 27-36; 43-50 AND 59-81.
RX MEDLINE=90062112; PubMed=2584205;
RA Connolly D.T., Olander J.V., Heuvelman D., Nelson R., Monsell R.,
Siegel N., Haymore B.L., Leimgruber R., Feder J.;
RT "Human vascular permeability factor. Isolation from U937 cells.";
RL J. Biol. Chem. 264:20017-20024(1989).
[15]
RP SEQUENCE OF 27-41.
RX MEDLINE=93145946; PubMed=7678805;
RA Fiebig B.L., Jaeger B., Schoellmann C., Weindel K., Wilting J.,
Kochs G., Marne D., Hug H., Welch H.A.;
RT "Synthesis and assembly of functionally active human vascular
endothelial growth factor homodimers in insect cells.";
RL Eur. J. Biochem. 211:19-26(1993).
[16]
RP X-RAY CRYSTALLOGRAPHY (2.5 ANGSTROMS) OF 34-135.
RX MEDLINE=97352774; PubMed=9207067;
RA Muller Y.A., Li B., Christinger H.W., Wells J.A., Cunningham B.C.,
de Vos A.M.;
RT "Vascular endothelial growth factor: crystal structure and functional
mapping of the kinase domain receptor binding site.";
RL Proc. Natl. Acad. Sci. U.S.A. 94:7192-7197(1997).
[17]
RP X-RAY CRYSTALLOGRAPHY (1.93 ANGSTROMS) OF 34-135.
RX MEDLINE=98035455; PubMed=9351807;
RA Muller Y.A., Christinger H.W., Keyt B.A., de Vos A.M.;
RT "The crystal structure of vascular endothelial growth factor (VEGF)
refined to 1.93-A resolution: multiple copy flexibility and receptor
binding.";
RL Structure 5:1325-1338(1997).
[18]
RP X-RAY CRYSTALLOGRAPHY (1.9 ANGSTROMS) OF 39-134.
RX MEDLINE=99119204; PubMed=9922142;
RA Wiesmann C., Christinger H.W., Cochran A.G., Cunningham B.C.,
Fairbrother W.J., Keenan C.J., Meng G., de Vos A.M.;
RT "Crystal structure of the complex between VEGF and a receptor-blocking
peptide.";
RL Biochemistry 37:17765-17772(1998).
[19]
RP STRUCTURE BY NMR OF 34-135.
RX MEDLINE=97477915; PubMed=9336848;
RA Fairbrother W.J., Champe M.A., Christinger H.W., Keyt B.A.,
Starovasnik M.A.;
RT "1H, 13C, and 15N backbone assignment and secondary structure of the
receptor-binding domain of vascular endothelial growth factor.";
RL Protein Sci. 6:2250-2260(1997).


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FT CHAIN 86 204
FT SITE 158 162
FT FT DISULFID 96 140
FT FT DISULFID 129 177
FT FT DISULFID 133 179
FT FT DISULFID 123 123
FT FT DISULFID 132 132
FT FT CARBOHYD 134 134
FT FT VARSPLIC 194 196
FT FT VARSPLIC 197 204
FT FT CONFLICT 85 111
FT FT CONFLICT 119 119
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Query Match 17.4%; Score 104; DB 1; Length 204;
Best Local Similarity 34.0%; Pred. No. 0.00046;
Matches 32; Conservative 12; Mismatches 34; Indels 16; Gaps

QY 11 CTPRNFVSIG-REELKRTDTIF--WPGGLLVKRGCGNCACCLHNCNCCQVPSKV---TK 64
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 96 CKTRTVIPEIRSQVDPTISANFLIWPCCVVKRCTG---CC--NTSSVKQCPSPVHRSV 150
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

QY 65 KYHEVQLRPKTVGRGLHKLSLTDVALEHHECDC 98
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :
Db 151 KVAKVEYVRKKPKLKEV-----QVRLEHLECAC 179
| : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : : :

RESULT 13
PDGA_HUMAN STANDARD; PRT; 211 AA.
ID PDGA_HUMAN
AC P04085;
DT 01-NOV-1986 (Rel. 03, Created)
DT 01-NOV-1986 (Rel. 03, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE Platelet-derived growth factor, A chain precursor (PDGF A-chain)
DE (PDGF-1).
DE GN PDGFA.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RX [1]
RP MEDLINE=88144463; PubMed=3422746;
RA Bonthron D.T., Morton C.C., Orkin S.H., Collins T.;
RT "Platelet-derived growth factor A chain: gene structure, chromosomal
RL location, and basis for alternative mRNA splicing.";
RL Proc. Natl. Acad. Sci. U.S.A. 85:1492-1496(1988).
RX [2]
RP SEQUENCE FROM N.A.
RP MEDLINE=88174698; PubMed=2832727;
RA Rorsman F., Bywater M., Knott T.J., Scott J., Betsholtz C.;
RX "Structural characterization of the human platelet-derived growth
RT factor A-chain cDNA and gene: alternative exon usage predicts two
RL different precursor proteins.";
RL Mol. Cell. Biol. 8:571-577(1988).
RX [3]
RP SEQUENCE FROM N.A.
RP MEDLINE=86203630; PubMed=3754619;
RA Betsholtz C., Johansson A., Heldin C.H., Westermark B., Lind P.,
RX Urdea M.S., Eddy R., Shows T.B., Philpott K., Mellor A.L., Knott T.J.,
RA Scott J.;
RT "cDNA sequence and chromosomal localization of human platelet-derived
RL growth factor A-chain and its expression in tumour cell lines.";
RL Nature 320:695-699(1986).
RX [4]
RP SEQUENCE FROM N.A.
RP MEDLINE=88030061; PubMed=3666150;
RA Hoppe J., Schumacher L., Eichner W., Weich H.A.;
RX "The long 3'-untranslated regions of the PDGF-A and -B mRNAs are only
RT distantly related";

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| FT | 174 | 174 | H -> D (IN REF. 1). |
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| SEQUENCE | 24102 | MW; | |

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| Query Match | 17.4% | Score 104; | DB 1; | Length 211; |
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| Matches 32; | Conservative | 12; | Mismatches 34; | Gaps 6; |
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| Db | 96 | CKTRTVIYEIPRSOQPTSANFLINPCCPEVEVRCTG---CC--NTSSVKCPQSRVHHRSV | 150 |
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RESULT 15

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TS15 SMSAV
ID TS15 SMSAV STANDARD; PRT; 226 AA.
AC P01128; O41283;
DT 21-JUL-1986 (Rel. 01, Created)
DT 21-JUL-1986 (Rel. 01, Last sequence update)
DT 01-MAR-2002 (Rel. 41, Last annotation update)
DE PGF-related transforming protein sis (p28sis).
GN V-SIS.
OS Simian sarcoma virus.
OC Viruses; Retroid viruses; Retroviridae; Gammaretrovirus.
OX NCBI_Taxid=11817;
RN [1]
R1 SEQUENCE FROM N.A.
R2 MEDLINE=83144004; PubMed=6298772;
R3 Devare S.G., Reddy E.P., Law J.D., Robbins K.C., Aaronson S.A.;
R4 "Nucleotide sequence of the simian sarcoma virus genome:
R5 demonstration that its acquired cellular sequences encode the
R6 transforming gene product p28sis."
R7 Proc. Natl. Acad. Sci. U.S.A. 80:731-735(1983).
R8
R9 -1- SIMILARITY: BELONGS TO THE PDGF/VEGF FAMILY OF GROWTH FACTORS.
R10
R11 -----
R12 This SWISS-PROT entry is copyright. It is produced through a collaboration
R13 between the Swiss Institute of Bioinformatics and the EMBL outstation -
R14 the European Bioinformatics Institute. There are no restrictions on its
R15 use by non-profit institutions as long as its content is in no way
R16 modified and this statement is not removed. Usage by and for commercial
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R18 or send an email to license@isb-sib.ch).
R19
R20 -----

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DR EMBL: V01201: CAA24516.1: A1.T INIT.

DR PIR; A01381; TVMVSS;

DR HSSP; P01127; 1PDG;

DR InterPro; IPR002400; GF_cysknot.

DR InterPro; IPR000072; PDGF.

DR Pfam; PF00341; PDGF; 1.

DR PRINTS; PR00438; GFCYSK

DR ProdOm: PD001629: PDGF: 1:

DR SMART: SM00141: PDGF: 1.

DR PROSITE: PS00249: PDGF 1: 1

DR PROSITE: PS50278: PDGF 2: 1

KW Oncogene: Growth factor

SEQUENCE 226 AA: 25411 MW

SEQUENCE 420 AA; Z5411 MW

Query Match 17 18:

| | |
|-----------------------|--------|
| Query Match | 17.48; |
| Best local similarity | 22.28; |

Best local similarity 33.38;
Matches 26. Generalization 1

Matches 36; Conservative 1

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QY 2 L7EEVRLYSCTPRN--FSVSIRE

Db 73 VAEPAMIAECKTRTEVFEIS-RR

Qy 58 VPSKVTKKYHEVLQLRP-----KT

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Db 127 RPTQV-----QLRPVQVRKI

Search completed: May 24, 2002, 10:02:03
Job time: 202 sec

GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 24, 2002, 09:58:21 ; Search time 24.76 Seconds
(without alignments)
740.608 Million cell updates/sec

Title: US-09-695-121-2_COPY_240_345
Perfect score: 597
Sequence: 1 LITEVRLYCTPRNFSVSI.....DVALEHHEEDCVCRGSTGG 106

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 562222 seqs, 172994929 residues

Total number of hits satisfying chosen parameters: 562222

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

- 1: sp_archaea.*
- 2: sp_bacteria.*
- 3: sp_fungi.*
- 4: sp_human.*
- 5: sp_invertebrate.*
- 6: sp_mammal.*
- 7: sp_mhc.*
- 8: sp_organelle.*
- 9: sp_phage.*
- 10: sp_plant.*
- 11: sp_rodent.*
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- 13: sp_vertebrate.*
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- 15: sp_rvirus.*
- 16: sp_bacteriap.*
- 17: sp_archaeap.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result No. | Score | Query Match % | Length | DB ID | Description |
|------------|-------|---------------|--------|-----------|---------------------|
| 1 | 597 | 100.0 | 345 | 4 Q9NRA1 | Q9nra1 homo sapien |
| 2 | 597 | 100.0 | 345 | 4 Q9UL22 | Q9ul22 homo sapien |
| 3 | 572 | 95.8 | 345 | 11 Q9QY71 | Q9qy71 mus musculus |
| 4 | 565 | 94.6 | 345 | 11 Q9JHV8 | Q9jnv8 mus musculus |
| 5 | 563 | 94.3 | 345 | 11 Q9EQX6 | Q9eqx6 rattus norv |
| 6 | 527 | 88.3 | 345 | 13 Q91946 | Q91946 gallus gall |
| 7 | 305.5 | 51.2 | 290 | 11 Q9D1L8 | Q9d1l8 mus musculus |
| 8 | 305.5 | 51.2 | 364 | 4 Q9BWW5 | Q9bww5 homo sapien |
| 9 | 305.5 | 51.2 | 370 | 4 Q9GZP0 | Q9gzp0 homo sapien |
| 10 | 305.5 | 51.2 | 370 | 11 Q9BQT1 | Q9bqt1 rattus norv |
| 11 | 305.5 | 51.2 | 370 | 11 Q9Z5I7 | Q9z5i7 mus musculus |
| 12 | 180 | 30.2 | 34 | 11 Q99JMA | Q99jma mus musculus |
| 13 | 117.5 | 19.7 | 326 | 11 Q91ZE4 | Q91ze4 rattus norv |
| 14 | 114.5 | 19.2 | 146 | 13 Q90X23 | Q90x23 bothrops ia |
| 15 | 108.5 | 18.2 | 148 | 13 Q42571 | Q42571 xenopus lae |
| 16 | 108.5 | 18.2 | 194 | 13 O42572 | O42572 xenopus lae |

| | | | | | |
|----|-------|------|-----|-----------|--------------------|
| 17 | 105 | 17.6 | 185 | 4 Q15354 | Q15354 homo sapien |
| 18 | 105 | 17.6 | 210 | 6 Q29613 | Q29613 felis silve |
| 19 | 105 | 17.6 | 226 | 4 Q9UF23 | Q9uf23 homo sapien |
| 20 | 104.5 | 17.5 | 126 | 6 Q9BDP7 | Q9bdp7 macaca mula |
| 21 | 104.5 | 17.5 | 169 | 4 Q96NW5 | Q96nw5 homo sapien |
| 22 | 104.5 | 17.5 | 191 | 4 Q96L82 | Q96l82 homo sapien |
| 23 | 104.5 | 17.5 | 191 | 4 Q96KJ0 | Q96kj0 homo sapien |
| 24 | 104.5 | 17.5 | 191 | 6 Q95NE5 | Q95ne5 macaca fasc |
| 25 | 104 | 17.4 | 118 | 11 Q9CU96 | Q9cu96 mus musculu |
| 26 | 104 | 17.4 | 194 | 13 Q90WK1 | Q90wk1 gallus gall |
| 27 | 104 | 17.4 | 196 | 11 Q99L56 | Q99l56 mus musculu |
| 28 | 104 | 17.4 | 198 | 13 Q90WK3 | Q90wk3 gallus gall |
| 29 | 104 | 17.4 | 211 | 13 Q90WK2 | Q90wk2 gallus gall |
| 30 | 102.5 | 17.2 | 189 | 6 Q95LQ4 | Q95lq4 felis silve |
| 31 | 102 | 17.1 | 301 | 5 Q9VWP6 | Q9vwp6 drosophila |
| 32 | 102 | 17.1 | 314 | 5 Q9BLX1 | Q9blx1 drosophila |
| 33 | 102 | 17.1 | 325 | 5 Q960Z8 | Q960z8 drosophila |
| 34 | 101.5 | 17.0 | 118 | 6 Q9WZB1 | Q9wzb1 ovis aries |
| 35 | 101.5 | 17.0 | 124 | 6 Q9GK00 | Q9gk00 callithrix |
| 36 | 101.5 | 17.0 | 190 | 6 Q77643 | Q77643 ovis aries |
| 37 | 100.5 | 16.8 | 144 | 13 Q73822 | Q73822 brachydanio |
| 38 | 100.5 | 16.8 | 146 | 13 Q90X24 | Q90x24 bothrops in |
| 39 | 100.5 | 16.8 | 188 | 13 Q73682 | Q73682 brachydanio |
| 40 | 100.5 | 16.8 | 190 | 11 Q9QX39 | Q9qx39 spalax leuc |
| 41 | 100.5 | 16.8 | 326 | 11 Q91ZHG | Q91zh6 meriones un |
| 42 | 99.5 | 16.7 | 415 | 11 Q91ZE3 | Q91ze3 rattus norv |
| 43 | 99.5 | 16.7 | 418 | 13 Q57352 | Q57352 coturnix co |
| 44 | 99.5 | 16.7 | 420 | 6 Q9XS50 | Q9xs50 bos taurus |
| 45 | 98 | 16.4 | 75 | 6 O18843 | O18843 cryotolagus |

ALIGNMENTS

RESULT 1

| | | | |
|--|--|---|---------|
| Q9NRA1 | PRELIMINARY; | PRT; | 345 AA. |
| ID Q9NRA1 | AC Q9NRA1 | DT 01-OCT-2000 (TREMBLrel. 15, Created) | |
| AC Q9NRA1 | DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update) | | |
| DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update) | DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update) | | |
| DE PLATELET-DERIVED GROWTH FACTOR C. | OS Homo sapiens (Human). | | |
| OS Homo sapiens (Human). | OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; | | |
| OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; | OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. | | |
| OX NCBI_TaxID=9606; | RN [1] | | |
| RN [1] | RP SEQUENCE FROM N.A. | | |
| RP SEQUENCE FROM N.A. | RC TISSUE=LUNG; | | |
| RC TISSUE=LUNG; | RX MEDLINE=20268201; PubMed=10806482; | | |
| RX MEDLINE=20268201; PubMed=10806482; | RA Li X., Ponten A., Aase K., Karlsson L., Abramsson A., Dutela M., | | |
| RA Li X., Ponten A., Aase K., Karlsson L., Abramsson A., Dutela M., | RA Backstrom G., Hellstrom M., Bostrom H., Li H., Soriano P., | | |
| RA Backstrom G., Hellstrom M., Bostrom H., Li H., Soriano P., | RA Betsholtz C., Heldin C.-H., Alitalo K., Ostman A., Eriksson U., | | |
| RA Betsholtz C., Heldin C.-H., Alitalo K., Ostman A., Eriksson U., | RT "PDGF-C is a new protease-activated ligand for the PDGF alpha- | | |
| RT "PDGF-C is a new protease-activated ligand for the PDGF alpha- | RT receptor." | | |
| RL Nat. Cell Biol. 2:302-309(2000). | CC -!- SIMILARITY: CONTAINS 1 CUB DOMAIN. | | |
| CC -!- SIMILARITY: CONTAINS 1 CUB DOMAIN. | DR EMBL; AF244813; AAF80597.1; - | | |
| DR EMBL; AF244813; AAF80597.1; - | DR InterPro; IPR000859; CUB. | | |
| DR InterPro; IPR000859; CUB. | DR InterPro; IPR000072; PDGF. | | |
| DR InterPro; IPR000072; PDGF. | DR Pfam; PF00431; CUB; 1. | | |
| DR Pfam; PF00431; CUB; 1. | DR Pfam; PF00341; PDGF; 1. | | |
| DR Pfam; PF00341; PDGF; 1. | DR SMART; SM00042; CUB; 1. | | |
| DR SMART; SM00042; CUB; 1. | DR SMART; SM00141; PDGF; 1. | | |
| DR SMART; SM00141; PDGF; 1. | DR PROSITE; PS01180; CUB; 1. | | |
| DR PROSITE; PS01180; CUB; 1. | DR PROSITE; PS0278; PDGF-2; 1. | | |
| DR PROSITE; PS0278; PDGF-2; 1. | SQ SEQUENCE 345 AA; 39043 MW; 590889CEA55CC5EA CRC64; | | |

Query Match 100.0%; Score 597; DB 4; Length 345;
Best Local Similarity 100.0%; Pred No. 2,7e-66;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 LITEEVRLYSCPTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
Db 240 LITEEVRLYSCPTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299
QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 345

RESULT 2
Q9UL22 PRELIMINARY; PRT; 345 AA.
AC Q9UL22;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE SECRETORY GROWTH FACTOR-LIKE PROTEIN FALLOTEIN (SPINAL CORD-DERIVED
DE GROWTH FACTOR) (PLATELET-DERIVED GROWTH FACTOR C).
GN HSCDGF OR PDGFC.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX NCBI_TaxID=9606;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=UTERUS;
RA Tsai Y.-J., Lee R.K.-K., Lin S.-P.;
RT "Fallotein, a novel growth factor like gene identified in human
RT uterus.";
RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC TISSUE=BRAIN;
RX MEDLINE=20317014; PubMed=10858496;
RA Hamada T., Ui-Tei K., Miyata Y.;
RT "A novel gene derived from developing spinal cords, SCDGF, is a unique
RT member of the PDGF/VEGF family.";
RN [3]
RP SEQUENCE FROM N.A.
RX MEDLINE=21347863; PubMed=11297552;
RA Gilbertson D.G., Duff M.E., West J.W., Kelly J.D., Sheppard P.O.,
RA Hofstrand P.D., Gao Z., Shoemaker K., Bukowski T.R., Moore M.;
RA Feldhaus A.L., Humes J.M., Palmer T.E., Hart C.B.;
RT "Platelet-derived Growth Factor C (PDGF-C), a Novel Growth Factor That
RT Binds to PDGF alpha and beta Receptor.";
RL J. Biol. Chem. 276:27406-27414(2001).
CC 1- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL; AF091434; AAF00049.1; -.
DR EMBL; AB033831; BAB03266.1; -.
DR EMBL; AF260738; AAK51637.1; -.
DR InterPro: IPR000859; CUB.
DR Pfam; PF00431; CUB; 1.
DR SMART; SM00141; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS01180; CUB; 1.
DR PROSITE; PS50278; PDGF_2; 1.
SQ SEQUENCE 345 AA; 39029 MW; CDE9E51F40633E78 CRC64;

Query Match 100.0%; Score 597; DB 4; Length 345;
Best Local Similarity 100.0%; Pred. No. 2,7e-66;
Matches 106; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCPTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
Db 240 LITEEVRLYSCPTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299
QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 345
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RESULT 3
Q9QY71 PRELIMINARY; PRT; 345 AA.
AC Q9QY71;
DT 01-MAY-2000 (TREMBlrel. 13, Created)
DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE FALLOTEIN (PLATELET-DERIVED GROWTH FACTOR C).
GN PDGFC.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=OVARY;
RA Tsai Y.-J., Lee R.K.-K., Chen Y.-H., Lin S.-P., Cheng W.T.-K.;
RT "cDNA cloning of fallotein from mouse ovary.";
RL Submitted (JAN-1999) to the EMBL/GenBank/DBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J;
RA Gao Z., Hart C., Piddington C., Sheppard P., Shoemaker K.,
RA Gilbertson D., West J., O'Hara P.J.;
RT "platelet-derived growth factor C (PDGF-C), a novel growth factor that
RT binds to PDGF alpha receptor.";
RL Submitted (MAY-2000) to the EMBL/GenBank/DBJ databases.
CC 1- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL; AF117608; AAF22516.1; -.
DR EMBL; AF266467; AAK58566.1; -.
DR MGD; MGI:1859631; Pdgcfc.
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR Pfam; PF00431; CUB; 1.
DR SMART; SM00042; CUB; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS01180; CUB; 1.
DR PROSITE; PS50278; PDGF_2; 1.
SQ SEQUENCE 345 AA; 38741 MW; 3A58A1F701B84EA2 CRC64;

Query Match 95.8%; Score 572; DB 11; Length 345;
Best Local Similarity 94.3%; Pred. No. 3.6e-63;
Matches 100; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

QY 1 LITEEVRLYSCPTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 60
Db 240 LITEEVRLYSCPTPRNFSVIREELKRTDTIFWPGCLLVKRCGGNCACCLHNCNECQCVPS 299
QY 61 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGSTGG 106
Db 300 KVTKKYHEVLQRLPKTGVRGLHKSLLTDVALEHHEECDCVCRGNAGG 345

RESULT 4
Q9JHV8 PRELIMINARY; PRT; 345 AA.
AC Q9JHV8;
DT 01-OCT-2000 (TREMBlrel. 15, Created)
DT 01-OCT-2000 (TREMBlrel. 15, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE PLATELET-DERIVED GROWTH FACTOR C.
GN PDGFC.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=SWISS-WEBSTER/NIH;
RX MEDLINE=20417814; PubMed=10960785;
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RA Fleischmann W., Gaaster

RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casa

Query Match 94.3%; Score 563; DB 11; Length 345;
Best Local Similarity 93.4%; Pred. No. 4.8e-62;
Matches 99; Conservative 3; Mismatches 4; Indels

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|---|-----|
| Q9BWV5; | AC |
| 01-JUN-2001 (TrEMBLrel. 17, Created) | DT |
| 01-JUN-2001 (TrEMBLrel. 17, Last sequence update) | DT |
| 01-DEC-2001 (TrEMBLrel. 19, Last annotation update) | DT |
| IRIS-EXPRESSED GROWTH FACTOR SHORT FORM. | DE |
| IEGF. | GN |
| Homo sapiens (Human). | OS |
| Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; | OC |
| Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. | OC |
| NCBI_TaxID=9606; | OX |
| [1] | RN |
| SEQUENCE FROM N.A. | RP |
| TISSUE=IRIS; | RC |
| Wistow G.; | RA |
| "Iris-expressed Growth Factor (IEGF)."; | RT |
| Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases. | RRL |
| -!- SIMILARITY: CONTAINS 1 CUB DOMAIN. | CC |
| EMBL; AY027518; AAK20082.1; - | CC |
| InterPro; IPR000859; CUB. | DR |
| InterPro; IPR000072; PDGF. | DR |
| InterPro; IPR000531; TonB_boxC. | DR |
| Pfam; PF00431; CUB; 1. | DR |
| SMART; SM00042; CUB; 1. | DR |
| SMART; SM00141; PDGF; 1. | DR |
| PROSITE; PS01180; CUB; 1. | DR |
| PROSITE; PS50278; PDGF_2; 1. | DR |
| PROSITE; PS00430; TONB_DEPENDENT_REC_1; UNKNOWN_1. | DR |
| SEQUENCE 364 AA; 42166 MW; 245C538DDDEA9EAC CRC64; | DSQ |

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DR Pfam: PF00431; CUB; 1.
DR SMART: SM00042; CUB; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE: PS01180; CUB; 1.
DR PROSITE: PS0278; PDGF_2; 1.
DR PROSITE: PS00430; TONBDEPENDENT_REC.1; UNKNOWN.1.
SQ SEQUENCE 370 AA; 42848 MW; D387F485E7BB7674 CRC64;

Query Match          51.2%; Score 305.5; DB 4; Length 370;
Best Local Similarity 52.9%; Pred. No. 7.4e-30;
Matches 54; Conservative 13; Mismatches 32; Indels 3; Gaps 1;

QY 2 LEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNECQCVPSK 61
DB 263 LNDVARYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNECQCVPSK 322
QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDVALEHHEECDCVC 100
DB 323 TVKKYHEVLQFEGHFKRGRKRAKTMALVDIQLDHERCDCIC 364

RESULT 10
Q9EQT1 PRELIMINARY; PRT; 370 AA.
AC Q9EQT1;
DT 01-MAR-2001 (TREMBlrel. 16, Created)
DT 01-MAR-2001 (TREMBlrel. 16, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE SPINAL-CORD DERIVED GROWTH FACTOR-B.
GN RSCDGF-B.
OS Rattus norvegicus (Rat).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
OX NCBI_TaxID=10116;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=21092670; PubMed=11162582;
RA Hamada T., Ui-Tei K., Inaki J., Miyata Y.;
RT "Molecular Cloning of SCDGF-B, a Novel Growth Factor Homologous to
SCDGF/PDGF-C/fallotelin.";
RL Biochem. Biophys. Res. Commun. 280:733-737(2001).
CC 1- SIMILARITY: CONTAINS 1 CUB DOMAIN.
DR EMBL: AB052170; BAB18920.1; -.
DR InterPro: IPR000859; CUB.
DR InterPro: IPR000072; PDGF.
DR Pfam: PF00431; CUB; 1.
DR SMART: SM00042; CUB; 1.
DR SMART: SM00141; PDGF; 1.
DR PROSITE: PS01180; CUB; 1.
DR PROSITE: PS0278; PDGF_2; 1.
SQ SEQUENCE 370 AA; 42809 MW; 7BE8A251F679BF73 CRC64;

Query Match          51.2%; Score 305.5; DB 11; Length 370;
Best Local Similarity 52.0%; Pred. No. 7.4e-30;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNECQCVPSK 61
DB 263 LNDVARYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNECQCVPSK 322
QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDVALEHHEECDCVC 100
DB 323 TVKKYHEVLQFEGHFKRGRKRAKTMALVDIQLDHERCDCIC 364

RESULT 11
Q925I7 PRELIMINARY; PRT; 370 AA.
ID Q925I7
AC Q925I7;
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
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DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE PLATELET-DERIVED GROWTH FACTOR D.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=BALB/C;
RX MEDLINE=21231380; PubMed=11331882;
RA LaRoche W.J., Jeffers M., McDonald W.F., Chillakuru R.A.,
RA Giese N.A., Lokker N.A., Sullivan C., Boldog F.L., Yang M., Vernet C.,
RA Burgess C.E., Fernandez E., Deegler L.L., Rittman B., Shinkets J.,
RA Shinkets R.A., Rothenberg J.M., Lichenstein H.S.;
RT "PDGF D, A Novel Protease-Activated Growth Factor.";
RL Nat. Cell Biol. 3:517-521(2001).
DR EMBL: AF335583; AAK38839.1; -.
SQ SEQUENCE 370 AA; 42809 MW; 9E80B4CF6813BFBE CRC64;

Query Match          51.2%; Score 305.5; DB 11; Length 370;
Best Local Similarity 52.0%; Pred. No. 7.4e-30;
Matches 53; Conservative 16; Mismatches 30; Indels 3; Gaps 1;

QY 2 LEEVRLYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNECQCVPSK 61
DB 263 LNDVARYSCTPRNFSVSIREELKRTDTIFWPGCLLVKRCGNCACLLHNCNECQCVPSK 322
QY 62 VTKKYHEVLQLRP---KTGVRGLHLSLTDVALEHHEECDCVC 100
DB 323 TVKKYHEVLQFEGHFKRGRKRAKTMALVDIQLDHERCDCIC 364

RESULT 12
Q99JM4 PRELIMINARY; PRT; 34 AA.
ID Q99JM4
AC Q99JM4;
DT 01-JUN-2001 (TREMBlrel. 17, Created)
DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
DE SIMILAR TO PLATELET-DERIVED GROWTH FACTOR, C POLYPEPTIDE
DE (FRAGMENT).
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Euthera; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=MAMMARY TUMOR. WAP-TGF ALPHA MODEL. 7 MONTHS OLD, GROSS
RC TISSUE.;
RA Strausberg R.;
RL Submitted (APR-2001) to the EMBL/GenBank/DBJ databases.
DR EMBL: BC060627; AAH06027.1; -.
FT NON_TER 1
SQ SEQUENCE 34 AA; 3618 MW; F4AB6A3A414AED9E CRC64;

Query Match          30.2%; Score 180; DB 11; Length 34;
Best Local Similarity 91.2%; Pred. No. 2.7e-15;
Matches 31; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 73 RPKTGVRLHLSLTDVALEHHEECDCVCGRSTGG 106
DB 1 RPKTGVRLHLSLTDVALEHHEECDCVCGRNAGG 34

RESULT 13
Q91ZE4 PRELIMINARY; PRT; 326 AA.
ID Q91ZE4
AC Q91ZE4;
DT 01-DEC-2001 (TREMBlrel. 19, Created)
DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
DT 01-DEC-2001 (TREMBlrel. 19, Last annotation update)
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042571
ID AC PRELIMINARY; PRT; 148 AA.
AC O42571;
DT 01-JAN-1998 (TReMBLrel. 05, Created)
DT 01-JAN-1998 (TReMBLrel. 05, Last sequence update)
DT 01-DEC-2001 (TReMBLrel. 19, Last annotation update)
DE VASCULAR ENDOTHELIAL GROWTH FACTOR 122.
GN VEGF.
OS Xenopus laevis (African clawed frog).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidae; Pipidae;
OC Xenopodinae; Xenopus.
OX NCBI_TaxID=8355;
RN [1]
RP SEQUENCE FROM N.A.
RA Cleaver O., Tonissen K.F., Saha M.S., Krieg P.A.;
RT "Neovascularization of the Xenopus embryo." ;
RL Dev. Dyn. 0:0-0(1997).
DR EMBL; AF008593; AAB63679.1; -.
DR HSSP; PI5692; 1VPP.
DR InterPro; IPR000072; PDGF.
DR Pfam; PF00341; PDGF; 1.
DR ProDom; PD001629; PDGF; 1.
DR SMART; SM00141; PDGF; 1.
DR PROSITE; PS00249; PDGF_1; 1.
DR PROSITE; PS02378; PDGF_2; 1.
SQ SEQUENCE 148 AA; 17234 MW; 4AD153CA2F8B1E95 CRC64;

Query Match      18.2%; Score 108.5; DB 13; Length 148;
Best Local Similarity 25.88; Pred No. 1.1e-05;
Matches 23; Conservative 21; Mismatches 34; Indels 11; G

QY 11 CTPRNFVSIREEL-KRTDTIFWPGCLLVKRCGNCACCLHNCNEQCQVPSRWTKRYHEV
   | | | | | : | | | | | : | | | | | : | | | | | :
Db 52 CQVREILVDIFOEYDVEYIFKSCVPLMRGAG---CC--NDNESLCVPTECYNTIWIQI
   | | | | | : | | | | | : | | | | | : | | | | | :
QY 70 LQLRPKTGYRGHLKSLTDVALEHHEDCD 98
   ::::| : : : : : | : | : | : | : | : | :
Db 107 MKIKPH-----ISQHINDMSFQQHSQCCEC 130

```


